DOES IT MATTER WHAT PRESIDENTS SAY? THE INLFUENCE OF PRESIDENTIAL RHETORIC ON THE PUBLIC AGENDA, 1946-2003

by

Adam B. Lawrence

B.A., Virginia Polytechnic Institute and State University, 1995

M.A., The University of Akron, 1997

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FACULTY OF ARTS AND SCIENCES

This dissertation was presented

by

Adam B. Lawrence

It was defended on

March 5, 2004

and approved by

Jeffrey E. Cohen, Department of Political Science, Fordham University

Susan B. Hansen, Department of Political Science, University of Pittsburgh

Jonathan M. Hurwitz, Department of Political Science, University of Pittsburgh

Bert A. Rockman, School of Public Policy and Management, The Ohio State University

Dissertation Advisor: David C. Barker, Department of Political Science, University of Pittsburgh

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Adam B. Lawrence, Ph.D.

University of Pittsburgh, 2004

Although scholars have long recognized the president's pre-eminent status as an agenda-setter, there is surprisingly little evidence available to suggest that presidents can and do influence the public agenda. While a modest literature reveals presidential speeches as important determinants of the public agenda, the assumption that rhetoric matters, commonly made by students of the presidency, has been largely unaccompanied by the support of empirical evidence. As a result, the question of whether presidential rhetoric constitutes an important ingredient of agenda setting success remains very much open to debate.

Based on an extensive content analysis of State of the Union Addresses from 1946 to 2003, this dissertation considers in three separate studies the influence of presidential rhetoric as a tool for setting the public agenda. The first considers the influence of several presidential rhetoric variables resulting from the content analysis on aggregate-level evaluations of the salience of 1,113 issues discussed by 11 presidents from 1946 to 2003. The second study estimates the influence of several moderators of the relationship between presidential rhetoric on the public agenda, based on the individual-level assessments of issue salience expressed by respondents following State of the Union Addresses given by Presidents Ronald Reagan, George H.W. Bush, Bill Clinton, and George W. Bush. Finally, based on an experimental analysis in which 340 subjects were shown edited videos of a presidential speech, the third study examines

the influence of the three specific forms of presidential rhetoric used by President George W. Bush in his discussion of the issue of the economy.

The findings demonstrate that (1) presidents respond to environmental conditions fashioning their State of the Union rhetoric, (2) presidents use their rhetoric to move issues onto the public agenda and, by claiming credit, presidents also move issues *off* the public agenda, (3) presidential rhetoric not only influences the public agenda directly, among those who watch the speech, but also indirectly by affecting media coverage after the speech, and (4) the influence of presidential rhetoric is more pronounced among those who support the president, who share similar political predispositions as the president, and who are politically sophisticated.

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PREFACE

First and foremost, I owe a tremendous debt of gratitude to my advisor, David Barker, for his generosity, wisdom, and above all, his patience. I could not have asked for a better mentor. It is your example toward which I strive. I am also especially grateful to Bert Rockman, a great scholar of the presidency, and an even better guy. Your good humor and extensive knowledge of all things presidential have been important ingredients in my development as a graduate student. I am also greatly indebted to Jeffrey Cohen, whose insightful comments, suggestions, and advice improved the quality of this dissertation far beyond what it would have been. Special thanks also go to Susan Hansen, who was always quick to offer an interesting new perspective from which to consider the question of presidential persuasion, and to Jonathan Hurwitz, whose expertise in political psychology and thoughtful critiques at various stages benefited this dissertation immeasurably. Thanks also to Barry Ames for providing the financial support necessary to purchase from the Roper Center the survey data used in Study 2. I must also express my sincere appreciation to Stephen Brooks, whose course "Agendas and Decisions" stimulated my early thinking on presidential agenda setting.

Finally, I am eternally grateful for the enduring support of my family. To my wife, Amie, the light of my life, I say thank you. Thank you for your love, your understanding, your patience, your encouragement, your kindness, and for just being you. Last, I dedicate this dissertation to the two people in this world whom I admire most: my parents, Buk and Betty Lawrence. Your unwavering support over the years made this dissertation, and everything else in my life, possible. Though separated by miles, you have been with me all the while. Thanks, Mom and Dad.

I. INTRODUCTION

"The president's is the only national voice in our affairs. Let him once win the admiration and confidence of the country and no other single force can withstand him. If he rightly interprets the national thought and boldly insists upon it, he is irresistible; the country never feels the zest for action so much as when its President is of such insight and calibre. Its instinct is for unified action and it craves a single leader."

Woodrow Wilson, 28th President of the United States (1908)

The ability to set the public agenda is widely regarded as one of the most important sources of presidential power (Baumgartner and Jones 1993; Cobb and Elder 1983; Downs 1972; Kingdon 1995). First, presidents may use their influence to keep controversial issues, or issues on which their position is unpopular, off the public agenda. Alternatively, presidents may be able to improve their public standing among the public by focusing on issues for which there is already considerable support for their position. In so doing, the president may be able to cultivate a degree of support among the public that could not be achieved by other presidents who do not engage in such agenda setting tactics. Second, Presidents who are successful in placing issues on the public agenda are frequently successful in placing those same issues on the congressional agenda (Kingdon 1995), and once presidents have convinced Congress to take up their policy proposals, the likelihood of success on subsequent roll call votes is significant (Canes-Wrone 2001a, 2001b; Edwards and Barrett 2000). Third, presidents successful in heightening an issue's salience among the public may be able to increase the weight of that issue in evaluations of their job performance (e.g. Edwards 1995; Krosnick and Kinder 1990). Presidents who are able to

control the issues on which their performance evaluations are based may be able to exert a certain degree of influence, albeit indirect, over their popularity ratings. Finally, increasing an issue's salience among the public is considered to be an effective call to action for critical groups of presidential supporters (Kernell 1997; Welch 2002). When a president calls attention to an issue, the response of much of the public is likely to be an increase in the level of salience for that issue. But for the most ardent among a president's supporters, an appeal for support on a particular issue may be just the impetus needed to move these citizens from tacit support to political activism.

Scholars have long recognized the president's pre-eminent status as an agenda-setter. (Baumgartner and Jones 1993; Kingdon 1995; Neustadt 1990). According to Baumgartner and Jones (1993), "no other actor can focus attention as clearly, or change the motivations of such a great number of actors, as the president" (241). Kingdon (1995) similarly concluded that, "the president can single-handedly set the agendas, not only of people in the executive branch, but also of people in Congress and outside of government" (23). Although the traditional model of the president as the primary agenda setter in American politics remains the dominant perspective, there is surprisingly little evidence available to suggest that presidents can and do influence the public agenda. While a modest literature reveals presidential speeches as important determinants of the public agenda (e.g. Behr and Iyengar 1985; Cohen 1995, 1997; Iyengar and Kinder 1987; Miller and Wanta 1996; Wanta 1997), the assumption that rhetoric matters, commonly made by students of the presidency, has been largely unaccompanied by the support of empirical evidence (Edwards 1996). As a result, the question of whether presidential rhetoric constitutes an important ingredient of agenda setting success remains very much open to debate.

Based on an extensive content analysis of State of the Union Addresses from 1946 to 2003, this dissertation consists of three separate studies of the influence of presidential rhetoric as a tool for setting the public's issue agenda. The first considers the influence of several presidential rhetoric variables resulting from the content analysis on aggregate-level evaluations of the salience of 1,113 issues discussed by 11 presidents from 1946 to 2003. The second study estimates the influence of several moderators of the relationship between presidential rhetoric on the public agenda, based on the individual-level assessments of issue salience expressed by respondents who watched State of the Union Addresses given by Presidents Ronald Reagan, George H.W. Bush, Bill Clinton, and George W. Bush. Finally, based on an experimental analysis in which 340 subjects were shown videos of the 2003 State of the Union Address, the third study examines the influence of the three forms of presidential rhetoric used by George W. Bush in his discussion of the issue of the economy.

In the following sections, this dissertation (1) considers the research on presidential speeches and the public opinion, (2) presents the results of a content analysis of presidential rhetoric in State of the Union Addresses, (3) details an issue priming perspective on presidential agenda setting, (4) describes the research design, methodology, and results of three separate studies of the influence of presidential rhetoric and the public agenda, (4) and discusses the implications of the findings

II. PRESIDENTIAL SPEECHES AND PUBLIC OPINION

A. PRESIDENTIAL SPEECHES AND PRESIDENTIAL APPROVAL

A considerable amount of research of research has investigated the influence of presidential speeches on public opinion, the lion's share of which has focused on presidential approval. While a substantial number of these studies have found presidential speeches to be an effective strategy for maintaining public support (Ragsdale 1984; Ragsdale 1987; Brace and Hinckley 1992, 1993), a number of other studies are less sanguine about the influence of presidential speeches (MacKuen 1983; Ostrom and Simon 1989; Simon and Ostrom 1989; Welch 2002). The first systematic analysis of the influence of speeches on presidential approval was conducted by Ragsdale (1984). The results of her study of 159 major speeches given by Truman through Carter indicate that each presidential speech resulted in an average increase in presidential approval of 3%, and exceeded the effects of important events, military activity, and inflation. In a subsequent analysis, Ragsdale (1987) examined the group bases of public reactions to presidential speeches. Importantly, the results demonstrate that the effects of major speeches on presidential approval were not felt equally across all segments of the population. With the exception of Nixon, Presidents Johnson through Reagan used their speeches to boost their popularity ratings among all groups of partisans. In contrast, while Johnson, Ford Carter, and Reagan all benefited from increased popularity among middle and high income groups following a speech, none of these presidents, with the unexpected exception of Reagan, received greater public support from those with low incomes. In more recent work addressing the influence

of speeches on presidential approval, Brace and Hinckley (1992, 1993) have established that, among the forms of political drama available to presidents, major speeches represent the most effective strategy for increasing presidential approval - an average of about 6% - while foreign travel had little impact at all, and domestic trips actually resulted in a negative impact on approval.

In contrast to the aforementioned analyses, a number of other studies cast considerable doubt on the efficacy of presidential speeches as an all-purpose strategy to halt declines or replenish losses in approval (MacKuen 1983; Ostrom and Simon 1989; Simon and Ostrom 1989; Welch 2002). Quite different from the results reported by Ragsdale (1984, 1987) and Brace and Hinckley (1992, 1993), Ostrom and Simon (1989) found in their study of presidential approval during the Reagan administration that presidential speeches resulted in the smallest influence on approval of any of the forms of political drama analyzed. While approval enhancing events and unemployment had the greatest impact on approval - an average increase in approval of 8% and 4%, respectively, the effects of foreign trips and speeches were much smaller, an average increase of 3% and 1%, respectively. Welch (2002) also examined the effect of presidential speeches on approval during the Reagan administration, but his data allowed him to distinguish between the reactions to Reagan's speeches of those who watched the entire speech, those who watched part of the speech, and those who heard or read about the speech later. Of ten major speeches given by Reagan from 1981 to 1984, just one resulted in a significant positive effect on presidential approval, and even this limited effect was confined to those who just watched part of the speech. Interestingly, four addresses produced a negative effect on approval. Two of these addresses produced a negative effect among those who watched part of the speech, and two of the addresses produced a negative effect among those who read or heard about the speech later.

Finally, in part of larger analysis of the influence of presidential speeches and approval, Edwards (2003) also examined the influence of Reagan's speeches on his popularity among the public. He found that the only time an increase in approval of 6% or more occurred after a Reagan speech, was when Reagan announced the commencement of an air strike against Libya on April 14, 1981.

Together, the research of Ostrom and Simon (1989), Welch (2002), and Edwards (2003) provide compelling evidence contradicting the image of Reagan as a "Great Communicator," who was able to use his charisma and political skills to overcome opposition to his presidency. In an analysis extending beyond the Reagan presidency to include Presidents Eisenhower through Reagan, Simon and Ostrom (1989) demonstrate that speeches did not consistently produce increases in approval and, in some cases, actually had a negative impact on presidential approval. The only instances in which a presidential speech led to an increase in approval was when the speech was accompanied by an approval enhancing event. Similarly, in his study of speeches and approval from Presidents Reagan through George W. Bush, Edwards (2003) demonstrates that, of the increases in approval that did occur during the time series examined, very few followed a presidential speech, most of those did follow speeches were within margin of error, and speeches in several cases were followed by losses in approval.

The conclusions reached in studies of the influence of speeches on presidential approval are decidedly mixed. How may their discrepant findings be reconciled? First, most of the research casting doubt on the effect of speeches is limited to the Reagan presidency. While these studies have been vital in readjusting our evaluations of the "Teflon" president, their findings are less useful in evaluations of the effectiveness of presidential speeches *across* presidential administrations.

Second, at least some of the discrepancy in the findings may be attributable to the different types of speeches included in the various studies. The analyses which found presidential speeches to be influential determinants of approval levels were all confined to major, nationally televised speeches, including inaugural addresses, State of the Union Addresses, and other addresses to joint sessions of Congress that were delivered during prime-time and were covered live by all three television networks (Ragsdale 1984, 1987, Brace and Hinckley 1992, 1993). In contrast, Simon and Ostrom (1989) selected the speeches used in their analysis according to a different set of criteria. All speeches, messages, and announcements broadcast live by at least one network were included in their analysis, while both State of the Union Addresses and inaugural addresses were excluded. Finally, the list of speeches used by Edwards (2003) includes both major and minor speeches- although the list is clearly dominated by the latter. Thus, it is apparent that the work of Ragsdale and Brace and Hinckley is based on speeches that were, on average, of a higher profile and viewed by more people, and not surprisingly more effective than the speeches used by Simon and Ostrom and Edwards in their research. Thus, in order to significantly increase in their popularity ratings among the public, the literature collectively suggests that president must resort to major, nationally televised addresses delivered in prime-time. Simple announcements or short messages delivered during the middle of the day and broadcast by just one or two of the major networks are insufficient.

B. PRESIDENTIAL SPEECHES AND POLICY PREFERENCES

A considerable amount of effort has also been devoted to studying the effects of speeches on the public's policy preferences. A number of studies have examined the effect of attributing presidential support for policies on public attitudes toward those policies. Using a split-ballot technique, Rosen (1973) found that fewer respondents would oppose a "family assistance plan," a fictitious policy, if they were told that it was President Nixon's plan than if they were not told it was Nixon's, although the differences in support were relatively modest. Thomas and Sigelman (1985) examined preferences to the same hypothetical policy, and a number of others, using the split-ballot research design. They found that attribution of the policies to Reagan did increase support for those policies, but only among those who expressed a strong psychological identification with President Reagan. In contrast to these findings, the research of Sigelman and Sigelman (1981) found that respondents were actually *less* likely to support various policies if responsibility for those policies was attributed to President Carter, than if responsibility was not attributed to Carter. In a study conducted by Hurwtiz (1989), respondents were asked if they supported or opposed a number of policies. After giving their answers, they were told President Reagan held the opposite position and were then given the opportunity to change their opinion, if they so chose. His results reveal that 3 out of 10 respondents elected to change their opinions after hearing President Reagan's positions differed from their own. Interestingly, of the policies presented to respondents, he found that individuals were nearly three times more likely to change their opinions on foreign policy issues, in comparison to domestic issues. This finding is in accord with the notion that the president is generally granted a greater degree of deference in matters of foreign affairs than in domestic policy. Hurwitz (1989) has demonstrated that "presidential followership" did not take place equally among all segments of the public.

Generally speaking, those most susceptible to presidential influence were unwilling or unable to bear the "cognitive costs" associated with arriving at an independent judgment about a given policy. Those with little political information, little interest in politics, and those for whom the issue was not salient, proved to be the most responsive to the president's influence. Finally, Mondak (1993) has demonstrated that it is possible to produce different levels of support for the same policy by simply inserting "source cues" in questions posed to respondents. The respondents in his study were exposed to 74 pairs of policy preference questions. For each pair, one question included a source cue, and the other did not. For example, concerning the issue of defense, half of the respondents were asked, *"Would you say that United States military is stronger than when Reagan took office, less strong, or the same?"* while the other half were asked *"Do you think the United States is stronger militarily than it was five years ago, or do you think it's about the same?"* The results indicate that attitudes toward the policies presented to respondents were to a statistically significant extent determined by the presence, or absence, of Reagan's name as a source cue. When source cues were not provided, approval of Reagan exerted much less impact on policy preferences in comparison to the opinions expressed toward policies when source cues were provided. Mondak (1993) also found that, the longer the question and the less information contained in the question, the less respondents relied on source cues when they were provided. Finally, the analysis has also shown that when the source cues were particularly prominent (i.e. when the amount of cue information was high, and the substantive content of the question was low), they had a much greater impact on policy preferences than when source cues were not prominent. While these studies do not necessarily gauge the public response to presidential speeches, they do suggest that at least a portion of the president's

influence on the public's policy preferences may simply result from learning that a president supports, or opposes, a particular policy.

In a study that does consider the influence of speeches on policy preferences, Gilboa (1987) examined the effect of President Reagan's televised speeches on public opinion toward the American military presence in Lebanon in 1983, and toward the TWA hostage crisis in 1985. Although Gilboa does not estimate the impact of speeches in a statistical analysis that controlled for alternative explanations of attitude change, his data do indicate more support for the military mission in Lebanon as measured by polls taken immediately after the speech in comparison to the level of support found immediately before the speech. In the midst of the TWA hostage crisis, Reagan gave a press conference in which he highlighted the dangers of a military operation to extricate the TWA hostages and warned against negotiating with terrorists. In polls taken immediately after the speech, public support for both of these policies declined in comparison to the support for these policies revealed by polls taken just prior to Reagan's press conference.

Perhaps the best available evidence addressing the question of whether presidential speeches are influential determinants of policy preferences is offered by Page, Shapiro and Dempsey (1987), and Page and Shapiro (1992). Their analysis estimated the impact of presidential speeches and numerous other influences (e.g. economy, war, events, and the mass media) on a diverse range of policy preferences over a 50 year period. The results show that presidents' speeches did influence public policy preferences, though the influence was confined to presidents with approval ratings above 50%. Their evidence further indicates that in order to have an impact on public opinion, it must be the president, and not other administration officials,

who delivers the speech. In fact, surrogates speaking on behalf of the president had a slightly *negative* effect on public policy preferences.

Meernik and Ault's (2001) study estimated the impact of presidential speeches, foreign travel, the use of military force, media coverage, and a number of other factors on public attitudes toward the president's handling of foreign policy. Among their findings, the authors demonstrate that positive news increased support, while negative news resulted in a decrease in support. The authors have also shown that, while foreign travel had no impact, both military force and nationally televised presidential speeches resulted in statistically significant increases in public support for the president's handling of foreign policy. Finally, Edwards (2003) has shown that Presidents Reagan and Clinton were both unable to influence public support for government services, Reagan was unable to increase support for defense spending, and Clinton was unable to generate increased support for health care, except among African-Americans.

C. PRESIDENTIAL SPEECHES AND AGENDA SETTING

1. The Congressional Agenda

While considerable attention has been given to the impact of presidential speeches on approval ratings and policy preferences, the empirical literature also suggests that speeches can be a particularly useful tool in presidential attempts to set the agendas of Congress, the mass media, and the public. Although research has examined the influence of presidential speeches on Congress, much of this work has focused on the effect of speeches on roll call votes, and very little has considered the influence such speeches have on the congressional agenda. One exception is a study conducted by Edwards and Wood (1999) which considers the attention given to the issues of crime, education, and health care in the 1980s and 1990s by Congress, as well as

the media and the president. The authors found that presidents were able to use their speeches, statements, and messages to influence the issues taken up in congressional hearings, although this influence was limited to foreign policy. In domestic affairs, speeches given by Bush and Clinton had strong statistically significant effects on congressional attention to the issues of education, Clinton's speeches influenced the congressional agenda on the issue of health care, and Reagan's speeches did not have a significant influence on the agenda of Congress. Interestingly, in no instance did their results indicate a reciprocal relationship: presidents did not respond to the congressional agenda in deciding which issues to address in their speeches.

In another study, Peake (2001) argues that the capacity of the president to influence the agendas of other actors in the political system has been underestimated in previous research (Wood and Peake 1998; Edwards and Wood 1999). Whereas Wood and Peake (1998) and Edwards and Wood (1999) have suggested that the president's influence on the congressional agenda is relatively limited, particularly in the realm of foreign policy, Peak (2001) points out that these studies were limited to a consideration of highly salient foreign policy issues. By extending the analysis to include less salient issues, Peake's analysis demonstrates that presidents substantially impacted congressional attention to foreign policy issues.

2. The Media Agenda

Existing research also indicates that presidents can affect the issues covered by the mass media, although the influence of presidents seems to be more limited and the relationship more interactive than the relationship between presidents and the congressional agenda. Edwards and Wood (1999) found that presidents were able to influence media attention to the domestic issues of health care and education, but not on foreign policy issues. The authors also discovered that presidents reacted to media coverage of crime and education in deciding which issues to address

in their speeches. In their study of the involvement of presidents and media in foreign policy agenda setting, Wood and Peake (1998) found that presidents reacted to media coverage of foreign policy issues, but had no impact themselves on media attention to foreign affairs. While the results reported by Edwards and Wood (1999) and Wood and Peake (1998) cast doubt on the influence of presidents on the media's agenda in the realm of foreign policy, Peake's (2001) analysis offers a different perspective. As with his analysis of presidents and the congressional agenda, Peake (2001) has similarly demonstrated that the dearth of presidential influence on the media's agenda uncovered in earlier studies may be attributed to their exclusion of less salient foreign policy issues. When the analysis is extended to both types of issues, Peake's (2001) results have shown that presidents substantially influenced media coverage to foreign policy issues.

3. The Public Agenda

The research of primary interest is that which examines the relationship between presidential speeches and the public agenda. The limited evidence available suggests that presidents can indeed influence which issues the public deems most important (Behr and Iyengar 1985; Iyengar and Kinder 1987; Cohen 1995, 1997). Behr and Iyengar (1985) found presidential speeches delivered between 1974 and 1980 to be influential determinants of public concern for the issues of inflation and energy, but not unemployment. For every presidential speech addressing energy and inflation, and additional 6% of citizens cited those issues as being the most important. In a similarly conducted analysis, Iyengar and Kinder (1987) found each presidential speech addressing the issue of energy resulted in an increase of public concern about that issue by 4%, and a speech addressing the economy resulted in an increase in concern about inflation by 8%.

The most comprehensive analysis of presidential influence on the public agenda was conducted by Cohen (1995, 1997). His studies examined the effects of State of the Union Addresses on public evaluations of the most important problem facing America from 1953 to 1989. Using Gallup's Most Important Problem Series, Cohen investigated the influence on the public agenda of issue attention (the number of mentions relevant to a particular issue), and substantive speech (the number of positions taken by presidents that could be classified as liberal or conservative), on the salience of economic, foreign policy, and civil rights issues. Cohen's (1995, 1997) analyses indicated attention to the issues had strong effects on public evaluations of issue salience immediately following the State of the Union Address for all three issue areas, as measured by the first poll taken after the president's speech. Substantive speech, however, was revealed to have no impact for any of the three issue areas. Cohen also estimated the persistence of presidential effects on the public agenda as measured by the last poll taken before the next State of the Union Address. He found that presidential influence persisted at least until year's end for foreign policy, but had disappeared for both civil rights and economic issues. Although recent research strongly suggests the "two presidencies" thesis (Wildavsky 1966) may not be a useful explanation for the president's influence on congressional roll call votes (e.g. Fleisher et al. 2000), Cohen's (1995, 1997) findings raise the strong possibility that a two presidencies effect may condition the president's influence on the public agenda. Finally, Cohen (1995, 1997) found that popular presidents were no more successful than unpopular presidents in setting the public agenda. One interpretation for this finding is offered by Miroff (1982), who point out that the office of the presidency bestows on all its occupants a credibility that encourages the public to listen to what they have to say, popular or not.

4. Presidents as Agenda Setters

As the preceding review of the literature demonstrates, presidents can influence what issues the public considers to be the most important. However, there are significant constraints on the ability of presidents to act as effective agenda setters. First, presidential speeches are almost never composed exclusively of issues presidents would prefer to address. Deteriorating economic conditions (Behr and Iyengar 1985; Iyengar and Kinder 1987; Cohen 1995), issues covered by the media (Behr and Iyengar 1985; Iyengar and Kinder 1987; Wood and Peake 1998; Edwards and Wood 1999; Peake 2001), issues debated by Congress (Edwards and Wood 1999; Peake 2001), important events (Peake 2001), and issues already on the public agenda (Cohen 1995; Hill 1998) can all affect what issues are emphasized by presidents in their speeches. Wood and Peake (1998) have thus concluded that presidents are inherently weak agenda setters due to the reactive nature of the office and the extent to which presidents are apt to take cues regarding the importance of issues from other actors in the political system. To be sure, presidents have always been, and likely will always be, responsive to outside influences in deciding which issues to discuss in their speeches. To ignore economic conditions, important events, and the issues that are already on the minds of Congress and the public, and being covered by the mass media, would be foolhardy. At the same time, presidents are not prisoners. While presidents must respond to some outside influences some of the time, extant research demonstrates that presidents also act as issue entrepreneurs, moving issues onto the agendas of other institutions and focusing attention on important presidential initiatives, essentially creating attention were none exists (Edwards 1999, 342).

Second, the effectiveness of presidential attempts to set the agenda may be severely hampered by the lack of public receptivity toward presidential speeches (Kernell 1997; Edwards

2000; Welch 2000; Welch 2002). It is widely conceded that presidential speeches are not likely to be a useful tool for changing the public's policy preferences. The research on selective exposure in social psychology collectively suggests that individuals who are predisposed to disagree with the president are much less likely to even watch the president's speech than those who are predisposed to agree with the president (Festinger 1957).[1] However, even if they do watch the speech, the evidence indicates that those previously supportive of the president will react positively to the speech, while those previously unsupportive will react negatively (Glaros and Miroff 1983).

However, the dynamics of public receptivity are likely to play out somewhat differently with regard to agenda setting. To set the public agenda, presidents need only to convince the public that an issue *should* be addressed, not *how* it should be addressed. That presidents preach in their addresses to a congregation of the converted is not necessarily an impediment to agenda setting success. In fact, such citizens are the ones most likely to respond to presidential attempts to increase an issue's salience among the public. Because those who watch televised presidential addresses tend to be more politically active than those who do not (Welch 2000), presidential speeches may be an effective strategy for spurring core groups of the president's supporters into action, either by contacting their representatives, by joining an issue advocacy group, or by speaking with others about the issues they heard the president address (Welch 2002). When it comes to their efforts to set the public agenda, it is argued that presidents ultimately address in their speeches precisely that segment of the population they would prefer to address.

[1] However, a number of scholars now believe that selective exposure is not a dominant pattern among the public (Cotton 1985; Donohew and Palmgreen 1971; Festinger 1964; Freedman and Sears 1965; Sears and Freedman 1967; Wicklund and Brehm 1976). Research has shown, for example, that individuals might not avoid dissonant information if they anticipated it would be easy to refute because of the weakness of the information, because of the low credibility of its source, or because of the strength of their own position. (Festinger 1964)

5. Evaluating the Research on Presidential Agenda Setting

Although this small collection of research has advanced our understanding of presidential agenda setting, a number of significant gaps remain. First, analyses of presidential agenda setting have too often been limited to the consideration of a relatively limited number of salient issues (Behr and Iyengar 1985; Iyengar and Kinder 1987; Edwards and Wood 1999; Wood and Peake 1998; but see Cohen 1995). As Peake (2001) points out, the conclusions one draws concerning the president's ability to set the agenda are likely to be substantially different when considering not only issues that have already received a great deal of attention, but also those that have not.

Second, most of the research on presidential agenda setting is limited to just a few administrations (Behr and Iyengar 1985; Edwards and Wood 1999; Iyengar and Kinder 1987; Miller and Wanta 1996; Peake 2001; Wanta 1997; Wood and Peake 1998). The question of whether the dynamics of agenda setting are unique to the individual occupants of the White House, or whether they are similar across presidencies, has not been sufficiently addressed.

Third, presidents may be able to influence the public agenda immediately after a speech is given, but how long does the influence of a president's rhetoric last? With the exception of one study that measures the influence of presidential rhetoric after one year's time (Cohen 1995), the question of whether presidents are able to sustain their influence on the public agenda with the rhetoric in their speeches has escaped scholarly attention.

Finally, and most importantly, while the literature demonstrates that presidents are able to use their speeches to influence the public agenda, little is known about what makes some speeches more effective than others. As the following content analysis makes clear, presidents rely on a diverse range of rhetorical appeals in their State of the Union Addresses- but does it matter what presidents say? The central purpose of the following studies is to determine what

influence this presidential rhetoric has, if any, on the issues that are identified by the public as the most important problems facing America

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III. CONTENT ANALYSIS OF STATE OF THE UNION ADDRESSES, 1946-2003

Since Harry Truman delivered the first televised State of the Union Address in 1947, presidents have been able, once a year every year, to capture the undivided attention of a significant portion of the American public. Because of the opportunity this occasion affords, presidents have used the State of the Union Address as the central battleground for their foreign and domestic priorities (Kessel 1975; Light 1999). Unlike many other speeches the president gives throughout the year which tend to be relatively short and often focus on a single issue or set of issues, the State of the Union Address is usually much longer and typically covers a broad panoply of issues. More than any other speech or message, the State of the Union Address represents the quintessential statement of the president's agenda. In an attempt to identify the rhetorical strategies used by presidents in their speeches, a content analysis of State of the Union Addresses delivered by presidents Harry Truman through George W. Bush from 1946 to 2003 was performed.[2]

A. PRESIDENTIAL RHETORIC

Selection of the presidential rhetoric variables identified in the content analysis and used in as independent variables in all subsequent studies was based in part on the "going public"

[2] Although this analysis is confined to presidential rhetoric in the State of the Union Address, other studies have examined the full range of presidential rhetoric (e.g. Edwards and Wood 1999) What this analysis loses in terms of being able draw from the universe of presidential speeches, it gains in making a detailed content analysis possible, the type of content analysis which would not be feasible in a study based on the full range of presidential rhetoric.

literature examining presidential influence on public opinion (issue attention, issue justifications, public appeals, foreign policy, and post-address speeches), in part on the congressional literature (congressional appeals, agenda size, and credit claiming), and in part on the social psychological literature on persuasion (fear appeals, compare and contrast, issue order, and American values). Brief descriptions of the presidential rhetoric variables resulting from the content analysis, and the coding schemes used for each, are provided below. Selected examples of each form of presidential rhetoric are provided in Appendix A.[3]

1. Issue Attention

The number of words used by the president to discuss the issue in question. The one positive finding that underscores the efficacy of presidential rhetoric concerns the influence of issue attention. Cohen (1995), Miller and Wanta (1996), and Wanta (1997) collectively found issue attention to be an important factor in public evaluations of issue salience.

2. Issue Justification

The number of words used by the president to justify the importance of a given issue. While issue attention refers to a president's discussion of an issue in its entirety, issue justification refers to the subset of that discussion in which the president makes an explicit attempt to justify the importance of that issue. Cohen (1995) has demonstrated that presidents are not able to increase the salience of an issue by taking a liberal or conservative position on that issue. But it is not known whether presidents are able to increase the importance of an issue among the public by simply arguing that it is important.

[3] While this study represents a somewhat broader treatment of presidential rhetoric than previous research, it should be pointed out that any attempts to quantify presidential rhetoric inevitably oversimplify the concept. As a result, missing from this analysis is a consideration of how presidents fashion their rhetoric, how issues are presented and framed, and the rhetorical skill with which speeches are delivered, all critical components of presidential rhetoric.

3. Public Appeals

The number of words used by the president to make a direct appeal for public support on the issue in question. While the number of appeals presidents have made to the public in their speeches has steadily increased over the past several decades (Lewis 1997; Lim 2002), the effects of these appeals on the public agenda have not been systematically explored.

4. Congressional Appeals

The number of words used by the president to appeal to Congress for action on the issue in question. While the nexus between appeals to Congress and the public agenda may not be immediately apparent, it is possible that citizens may deem such an appeal as a more genuine indicator of an issue's importance than a public appeal. The average citizen's thinking may be, "If president Bush thinks Congress ought to pass a law to fix this, it must be a problem," whereas the same citizen may dismiss a direct appeal to the public as so much hot air.

5. Fear Appeals

The number of words used by presidents in referring to negative consequences that are likely occur if their position on a given issue is not adopted. Research conducted by social psychologists demonstrates that fear appeals can be persuasive, if used properly. Because strong fear appeals tend to arouse people's defenses, and weak appeals are likely to register no effects at all, moderate fear appeals have the greatest potential to persuade an audience (Mewborn and Roger 1979; Mongeau 1998; Natarajan 1979; Larson 2000). The study of fear arousing rhetoric also has a strong foundation in the political science literature. Presidential candidates, in who they are or what they do, have been shown to engage emotions (Abelson et al. 1982; Markus 1988a; Markus and MacKuen 1993), as have members of Congress (Hibbing and Theiss-Morse 1998), as well as policies (MacKuen et al. 2001). These threats may arise from the state of the

economy (Conover and Feldman 1986a), they may stem from threats to group identification or group interests (Nadeau, Neimi, and Amato 1995; Pantoja and Segura 2001), or even from the state of the nation in a general sense (Rahn 2000). This program of research has demonstrated that the use of fear arousing appeals can lead to increased voter mobilization, to greater interest in political affairs, and to a motivation to become more politically knowledgeable (Markus and MacKuen 1993; Markus, Neuman, and MacKuen 2000). Despite the considerable attention it has received in the psychology and political science literatures, it is not known whether the use of fear appeals by presidents constitutes an effective agenda setting strategy.

6. Compare and Contrast

The number of words used by presidents to compare and contrast their policy for dealing with a given issue with the policies proposed by others. A considerable body of evidence has accumulated in the experimental literature that indicates two-sided messages are more persuasive than one-sided messages (Allen 1998; Larson 2000; O'Keefe 1990; Trenholm 1989). By drawing favorable comparisons between their policy proposals and those of others, presidents may be able to increase the salience of issues those policies are designed to address.

7. Agenda Size

The number of issues discussed by the president in a given State of the Union Address. While evidence suggests that agenda size is inversely related to presidential success on roll call votes (Rivers and Rose 1985), it is not known whether large agendas inhibit a president's ability to set the public agenda. Although Light (1999) gives an informative treatment of the importance of limiting agenda size, his expectations have not been subjected to empirical analysis.

8. Issue Order

The order in which each issue was discussed in the president's State of the Union Address. It is expected that presidents will be more successful in placing issues featured prominently in their speeches on the public agenda than issues discussed toward the end of their speech. Given the public's limited attention to politics (e.g. Delli Carpini and Keeter 1992), the public is likely to pay closer attention to the beginning of a president's speech than to the end.

9. American Values

The number of words used by presidents to associate a policy or issue with cherished American values.[4] There is convincing evidence to suggest that political figures who are able to associate policies with particular American values are able to substantially increase public support for those policies. Relying on analyses based on experimental and survey data, Barker (2002) has shown that Rush Limbaugh was able to change citizens' attitudes toward particular public policies through his political talk radio program by associating those policies with certain American values, such as individualism.

10. Foreign Policy

A dummy variable indicating whether the issue in question involved matters of foreign policy or defense. While the "two presidencies" thesis has not fared well in recent research on presidential influence in Congress (e.g. Fleisher et al. 2000), research suggests that the public extends an unusually high degree of deference to the president in the realm of foreign policy (Cohen 1995; Hill 1998; Hurwtiz 1989; Mondak 1993). Public deference on foreign policy issues may stem from the public's desire to make sure "politics stop at the water's edge" (Tatalovich

[4] The values selected for inclusion in this analysis include freedom, individualism, egalitarianism, tolerance, justice, and democracy. Selection of these values is based on a long and venerable tradition of research that examines the importance of values as determinants of public opinion (Conover and Feldman 1984; Feldman 1988; Kluckhohn 1951; Rokeach 1973; Sniderman et al. 1991; Tetlock 1986).

and Daynes 1979, 1984), or it may stem from the public's perception that foreign policy issues hold less immediate relevance to their own lives and are more complex than domestic issues.

11. Post-Address Speeches

The number of speeches given by the president during the week following the State of the Union Address that discuss issues mentioned in the address.[5] By giving a speech immediately following their State of the Union Address, presidents may be able to reinforce the importance of particular issues among the public. In so doing, presidents may be able to reach segments of the public did not see their speech, and reinforce the salience of issues that represent their most important priorities.

12. Credit Claiming without Evidence

The number of words used by the president in claiming credit for success in dealing with the issue in question. Whereas Mayhew (1974) considered credit claiming as a strategy used by members of Congress to improve their reelection prospects, it is certainly evident that presidents also engage in credit claiming. Presidents may be able to improve their chances of being reelected by reminding the public of the progress that was made during their tenure in dealing with various issues. Also, by highlighting progress made in addressing various issues, presidents may be able to use credit claiming to boost their approval levels. Finally, credit claiming may be a useful tool for moving issues *off* the public agenda. If the president is able to convince the public that progress has been made in dealing with an issue, then the percentage of citizens citing that issue as the most important problem should decline. Because presidents are constantly trying to convince the public that "their" issues are the most important issues, the ability to move "old"

[5] Included in this study were speeches delivered live to a national television audience. Data were collected from *Public Papers of the Presidents of the United States* (various issues). One week was selected as the interval because it represents the longest possible time after the president's speech during which no poll was conducted measuring the public agenda.

issues off the public agenda may be as valuable to a president as being able to move new issues onto the agenda.

13. Credit Claiming with Evidence

The number of words used by presidents referring to quantitative evidence of success in dealing with the issue in question (numerical facts, figures, and statistics). Presidents may be able to enhance the influence of their credit claiming rhetoric by citing actual evidence of success in dealing with the issue in question. Existing research strongly supports the notion that evidence enhances persuasion. In a variety of research settings, messages that incorporate evidence have repeatedly been found more persuasive than messages that do not (Larson 2000; Perloff 1993; Petty and Cacioppo 1986).

B. RESULTS

The results of the content analysis appear in Table 1. They demonstrate, first of all, that it was the early presidents who gave the greatest amount of attention to the issues in their State of the Union Addresses. The addresses delivered by Truman, Eisenhower, and Kennedy, in particular, featured the highest average amount of attention per issue. After ebbing during the Reagan and Bush administrations, average levels of issue attention increased dramatically in the State of the Union Addresses delivered by Clinton, and has remained high in the first three addresses given by George W. Bush.

Second, although other presidents appealed to the public and Congress, Clinton surpassed all of his colleagues in his determination to stimulate public and congressional support for the policies proposed in his annual messages. While Clinton's public appeals were used generously for issues both foreign and domestic, his appeals for congressional action were used almost

TABLE 1. Content Analysis of Presidential Rhetoric in State of the Union Addresses, 1946-2003

Presidential Rhetoric Variable	HST	DDE	JFK	LBJ	RMN	GRF	JEC	RWR	GHWB	WJC	GWB
Issue attention	237.0	233.6	245.6	146.6	184.7	204.0	153.6	147.9	121.9	200.7	232.5
Issue justification	34.2	35.7	47.8	18.1	23.2	28.4	19.0	18.7	18.1	27.8	22.2
Congressional appeals	6.5	6.0	2.4	3.9	6.1	4.6	1.5	1.5	4.9	11.2	9.0
Public appeals	0.7	1.2	0.8	1.3	0.0	0.0	0.6	0.6	0.0	5.7	1.0
Credit claiming without evidence	11.8	11.7	13.4	11.3	14.1	18.3	11.5	13.9	11.9	18.3	12.8
Credit claiming with evidence	4.1	3.0	5.9	5.5	4.2	5.5	4.7	5.8	4.1	9.0	5.7
Agenda size	19.8	19.4	17.7	22.3	18.0	14.0	15.6	17.5	19.3	26.8	15.6
Foreign policy	18.5	15.9	23.1	16.3	10.3	7.0	8.7	4.0	5.3	7.0	14.1
American values	0.4	0.5	0.4	0.2	0.3	0.2	0.4	0.5	0.2	0.3	0.3
Fear appeals	6.2	3.8	11.9	3.2	5.8	11.1	2.2	3.4	1.9	5.2	9.0
Compare and contrast	5.3	4.2	7.7	4.7	11.1	7.1	1.9	6.8	2.9	5.0	4.6
Post-address speeches	0.1	0.0	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.4	0.3

Note: Entries for "Issue attention" are the average number of words used by presidents in discussing the issues in their State of the Union Addresses. Entries for "Foreign policy" reflect the percentage of all issues discussed by presidents that involved matters of foreign policy and defense. Entries for "Agenda size" reflect the average number of issues discussed by presidents in their State of the Union Addresses. Entries for "Post-address speeches" reflect the average number of speeches given per issue mentioned in the State of the Union Address. All other entries are the average number of words per issue used by the president to make a given rhetorical appeal. Data collected from *The Public Papers of the Presidents of the United States*.

exclusively for domestic issues, and only in trumpeting the most important priorities of his presidency, such as crime control, health care reform, and welfare reform.

Third, the results also show that presidents Ford and Clinton were the most active in credit claiming without the use of evidence. Much of Clinton's credit claiming rhetoric highlighted the improvement in economic conditions that occurred during his administration. In particular, Clinton attempted to claim credit for cutting the federal deficit, reducing the national debt, and promoting economic growth. Ford, in contrast, attempted to claim credit for addressing a range of different issues, including the economy, crime, drugs, and improving relations with China, the Soviet Union, and the Middle East. Although both Clinton and Ford relied on credit claiming without evidence, Clinton surpassed Ford, as well as the other nine presidents, in the amount of quantitative evidence he cited in claiming credit for dealing with the issues mentioned in his State of the Union Addresses.

Fourth, a number of presidents placed particularly heavy emphasis on foreign policy. The presidents who emphasized foreign policy the most were Kennedy, Truman, Johnson, Eisenhower, and George W. Bush, respectively. Not surprisingly, significant international events occurred during each of the aforementioned presidential administrations. Kennedy's presidency was dominated by the Cuban Missile Crisis, the Berlin Crisis, and the Vietnam War. Much of Truman's presidency was devoted to prosecuting the war in Korea. Vietnam consumed, and ultimately ended, Johnson's presidency. Concerns about U.S.-Soviet relations and Communism at home and abroad loomed large during the Eisenhower administration. More recently, the war against terrorism precipitated by the attack on the World Trade Center has occupied the full attention of George W. Bush's administration.

Fifth, presidents have increasingly used the post-address speech as a strategic tool to reinforce the importance of certain issues mentioned in the State of the Union Address. Interestingly, the incremental increase in the use of post-address speeches closely parallels the growth of "going public" activities noted by Kernell (1996). Also, presidents selectively used their post-address speeches for their most important priorities. Reagan used the post-address speech in discussing the economy, tax cuts, and the national defense, George H.W. Bush spoke mostly about the Persian Gulf War, education, and family values in his speeches, Clinton gave speeches on the economy, health care, and gun control, and George W. Bush has focused on Iraq, international terrorism, and tax cuts in his post-address speeches.

Finally, the size of the president's agenda varies considerably, from a maximum of 49 issues discussed by Clinton in 2000, to a minimum of 10 issues mentioned by George H.W. Bush in 1990. Because of their preference for a more active federal government, Democratic presidents have, on average, discussed more issues in their speeches than have Republican

presidents. In fact, the three largest average agenda sizes are from Democratic presidents (Clinton: 27, Johnson: 22, Truman: 20). In contrast, three of the four smallest average agenda sizes are from speeches given by Republican presidents (Ford: 14, George W. Bush: 16, Reagan 18). The six Republican presidents discussed an average of 17 issues, and the five Democratic presidents discussed an average of 21 issues.

IV. AN ISSUE PRIMING PERSPECTIVE ON PRESIDENTIAL AGENDA SETTING

While its application has largely been confined to the study of the media's influence on public opinion, priming theory may also help to explain the dynamics of presidential agenda setting. When confronted with having to make a decision, people simply do not possess the cognitive capacity necessary to take all plausible considerations into account, to carefully weigh their import, and to integrate them into a final summary decision (Iyengar and Kinder 1987; Krosnick and Kinder 1990; Tourangeau and Rasinski 1988; Zaller and Feldman 1992). Faced with complexity and uncertainty, and lacking the wits to optimize, human beings must be willing to "satisfice" and find solutions that are "good enough" (Simon 1979, 3). Thus, people often rely on shortcuts, or cognitive heuristics (Khaneman, Slovic, and Tversky 1982; Lupia 1994; Simon 1955, 1978, 1979, 1986). One such heuristic is a reliance on whatever information is most *accessible* at that particular time (Bargh 1982, 1984, 1989; Fazio 1986; Higgins and Bargh 1987; Taylor 1982).

Applied to the context of agenda setting, presidents may be able to use their speeches to heighten the accessibility of certain issues they wish to place on the public agenda. Just as the media prime certain issues in the minds of citizens (e.g. Bartels 1993; Gilliam and Iyengar 2000; Iyengar 1991; Iyengar and Kinder 1987; Iyengar et al. 1982; Krosnick and Kinder 1990; Krosnick and Brannon 1993; Shah et al. 1999; Valentino Miller and Krosnick 1999), so too might presidents be able to prime issues with the rhetoric in their speeches (Edwards et al. 1995; Zaller 1992, 1994). As Zaller (1992) and Zaller and Feldman (1992) explain, individuals that

have been asked a survey question do not normally canvass their minds for all considerations relevant to the decision before them. Rather, they are likely to respond based on whatever considerations are accessible at the "top of the head." Thus, when presented with the question, "*What is the most important problem facing America today*?" respondents are likely to answer based on whatever issues have been primed, or are most accessible.

Of course, the president represents but one possible source of influence on the public agenda. Indeed, the literature collectively demonstrates that contextual factors (e.g. economic conditions, exogenous events, media coverage, etc.) often outweigh the importance of presidential speeches and other forms of "political drama" as determinants of public opinion (Brace and Hinckley 1992; Marra, Ostrom, and Simon 1990; Ostrom and Simon 1989; Simon and Ostrom 1989). This is not to suggest that presidents are powerless, however. To the contrary, previous research demonstrates that presidents can use their speeches in an entrepreneurial fashion to focus the attention of other actors in the political system, especially when the issue is important to them and constitutes a major presidential initiative (Edwards 1999, 342). The primary of objective of the following studies is to evaluate the extent to which presidents are able to "prime" issues in the minds of citizens in successful attempts to set the public agenda.

V. STUDY 1: PRESIDENTIAL RHETORIC AND AGGREGATE-LEVEL EVALUATIONS OF ISSUE SALIENCE, 1946-2003

A. RESEARCH DESIGN

1. Data and Sample

This study considers the influence of presidential rhetoric on public evaluations of the importance of 1,113 issues discussed by 11 presidents in their State of the Union Addresses from 1946 to 2003.[6] The units of analysis are issues. For example, The 34 issues discussed by President Truman in his 1946 State of the Union Address represent the first 34 cases in the dataset. The 16 issues discussed by Truman in his 1947 address represent cases 35 through 49. And so on.[7] The public agenda was estimated as a function of presidential rhetoric, media coverage, contextual influences, and a number of control variables.

2. The Public Agenda

For each issue mentioned by the president in the State of the Union Address, the dependent variable was calculated as the percentage of respondents citing an issue as most

[6] In 1973 Nixon broke with tradition and delivered a series of written policy messages to Congress in lieu of giving a State of the Union Address. Because there was no nationally broadcast presidential speech to a joint session of Congress that year, 1973 was excluded from all analyses.

[7] This description seems to suggest time series or even time-series cross-sectional data. However, the data do not meet the requirements of time-series analysis because each case, or issue, was not observed at a different point in time and at equally spaced intervals. The data are not time-series cross-sectional because the data do not consist of repeated measurements over time of the same set of units, in this case issues. While some issues are repeated from year to year, their numbers were not sufficient to warrant the use of time series analysis. Overall, an average of 17% of the issues discussed by the president in a given year were discussed by the president the following year. Nevertheless, because some issues were repeated from year to year, diagnostic tests recommended by Markus (1979) and Menard (1991) for the analysis of panel data were conducted to test for the presence of autocorrelation and heteroskedasticity. The results of these diagnostic tests revealed no significant autocorrelation or heteroskedasticity present in the measures of the public agenda.

important immediately *after* the address, minus the percentage citing the same issue as most important immediately *before* the address.[8] For example, if 20% of respondents reported crime as the most important problem immediately before a State of the Union Address in which crime was mentioned, and 25% cited crime as most important after the address, then the value of the dependent variable for crime would be 5%. To gauge the persistence of presidential influence, this study also estimated the influence of presidential rhetoric on the change in issue salience from immediately before the president's address to two months, four months, and six months after the president's address. For example, the public agenda in the analysis conducted two months after the State of the Union Address is calculated as the percentage citing an issue as most important two months after the address, minus the percentage citing the same issue as most important immediately before the address. Measured in this way, the dependent variables in each of the four separate analyses represent the aggregate change in the salience of issues mentioned in the State of the Union Address, from before the address to after the address.

3. Presidential Rhetoric

While the empirical record demonstrates presidents are able to use their speeches to influence the public agenda, little is known about what makes some speeches more effective than others. As the results of the content analysis demonstrate, presidents rely on a diverse range of rhetorical appeals in their speeches. However, the effects of many of these appeals have not been

[8] Gallup's Most Important Problem series provided the overwhelming majority of data points required for the construction of the dependent variables in this analysis. In some cases, however, Gallup did not ask the "most important problem" question at certain points in time when those data were needed to construct the dependent variable. In such cases, polling data from other survey organizations were used to supplement the Gallup data. Overall, fewer than 2% of the polls used were conducted by organizations other than Gallup. The survey organizations whose polls were used to supplement the Gallup data include ABC News/*Washington Post*, Cambridge National Reports, Harris, National Opinion Research Center (N.O.R.C.), and Yankelovich. While the data collection procedures employed here may introduce measurement error into the analysis, the results will likely understate the true effect of the independent variables on the public agenda and should not result in any systematic bias in estimation. After identifying the polls used in the analysis, the public agenda was coded separately and independently by the author and a research assistant. The independently coded data were used to conduct a reliability analysis which yielded an inter-coder reliability rating of $\alpha = .957$.

systematically examined. The central objective of Study 1 consists of an evaluation of the influence of the 12 forms of presidential rhetoric variables resulting from the content analysis, described below in summarized form.

***a. Issue attention*.** The number of words used by the president to discuss an issue.[9]

***b. Issue justification*.** The number of words used by the president to justify the importance of a given issue.

***c. Public appeals*.** The number of words used by the president to make a direct appeal for public support on a given issue.

***d. Congressional appeals*.** The number of words used by the president in appealing to Congress for legislative action on a given issue.

***e. Fear appeals*.** The number of words used by presidents in referring to negative consequences likely to occur if their position on a given issue is not adopted.

***f. Compare and contrast*.** The number of words used by presidents to compare and contrast their policy for dealing with a given issue with the policies proposed by others.

***g. Agenda size*.** The number of issues discussed by the president in a State of the Union Address. For the purpose of this study, an issue is defined as any subject identified by the president as a matter to be addressed by the federal government.

***h. Issue order*.** The order in which each issue was discussed in the State of the Union Address.

[9] Because the length of the State of the Union Address varies over time, "the number of words" used to make a given appeal may be an inappropriate coding strategy. One alternative is to recode the nine relevant variables from "the number of words" to "the proportion of the speech" used to make a given appeal. To investigate the advisability of this option, two sets of models were estimated that differed in just one respect: the first included the nine rhetoric variables coded as "the number of words," while the second included the nine rhetoric variables measured as "the proportion of the speech." Notably, the substantive results of the first set of models did not differ from the second. For this reason, and also to preserve "word" as the unit of measurement, the original coding scheme was maintained.

i. American values. The number of words used by the president to associate an issue with specific American values.[10]

j. Foreign policy. A dummy variable indicating whether the issue involves matters of foreign policy or defense.

k. Post-address speeches. The number of speeches given by the president during the week after the State of the Union Address that discuss each issue mentioned in the address.[11]

l. Credit claiming without evidence. The number of words used by the president in claiming credit for success in addressing an issue.

m. Credit claiming with evidence. The number of words used by the president in referring to quantitative evidence of success in addressing an issue (numerical facts, figures, and statistics).

4. Media Coverage

While millions of Americans refrain from watching the State of the Union Address every year, they may read a newspaper article or watch a news program after the speech that covered an issue mentioned by the president. Thus, presidents may be able to use their rhetoric as an indirect source of influence on the public agenda by affecting what issues the media cover in the days, weeks, and months after the speech. Media coverage was defined as the total number of stories addressing each issue mentioned in the State of the Union that appeared on the front page of the *New York Times*[12] after the speech and before the poll measuring the public agenda.

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[10] The values used in this analysis include freedom, individualism, egalitarianism, tolerance, justice, and democracy and is based on a venerable program of research on the importance of values as determinants of public opinion (e.g. Kluckhohn 1951; Rokeach 1973; Conover and Feldman 1984; Feldman 1988; Sniderman et al. 1991; Tetlock 1986).

[11] Included in this study are speeches delivered to a live television audience. Data were collected from *The Public Papers of the Presidents of the United States*. One week was selected as the interval because it represents the longest possible time after the president's speech during which no poll was conducted measuring the public agenda.

[12] The proliferation and diversification of print, broadcast, and online media call into question, at least to some extent, the continued use of *The New York Times* as a proxy measure of media coverage. However, *The New York Times* provides what is arguably still the most representative account of the country's national and international news, especially when compared to the front pages of most other national newspapers which tend to focus more heavily on local concerns, such as *The Washington Post* and *The Los Angeles Times*.

5. Contextual Factors

The influence of environmental conditions on the public agenda has been well documented in previous research on presidential agenda setting. In order to differentiate the change in issue salience explained by environmental conditions from the change explained by presidential rhetoric and other variables, this study controls for several contextual factors. First, the *prior public agenda* reflects the average percentage of respondents who believed each issue mentioned by the president was the most important, measured during the month prior to the speech. Second, *prior media coverage* represents the total number of stories addressing each issue mentioned by the president that appeared on the front page of *The New York Times* during the month prior to the speech. Third, *important events* indicate the total number of events relevant to each issue mentioned by the president that occurred during the month prior to the speech.[13] Fourth, *economic conditions* were measured as an interaction between the misery index,[14] and a dummy variable categorizing issues mentioned in the speech as economic or non-economic. The resulting variable estimates the effect of economic conditions on the salience of economic issues. Fifth, *military conflict* was measured as an interaction between a dummy variable indicating whether the U.S. was involved in military conflict at the time of the speech,[15] and a dummy variable differentiating foreign policy and defense issues from other issues. The resulting variable estimates the influence of military conflict on the salience of foreign and defense issues. Finally, *presidential scandals* refer to congressional investigations of the

[13] Based on criteria in Brace and Hinckley (1992), an event was included if it appeared in two of the following: *World Almanac and Book of Facts*, *The Almanac of American History* (Schlesinger 1983), and *The Encyclopedia of American Facts and Dates* (Carruth, various issues).
[14] The misery index combines the average percentage change in the Consumer Price Index with the average rate of unemployment, both measured during the month prior to the State of the Union Address.
[15] The list of military conflicts used in the analysis is from Ragsdale's (1996) *Vital Statistics on the Presidency.*

president, active at the time of the State of the Union, generating at least 20 front page stories in *The New York Times*.[16]

6. Presidential Resources

The influence of presidents on other actors in the political system is frequently assumed to depend on the extent to which they possess certain resources. This study considers the influence of three such resources. *Popularity* was operationalized as the average approval rating measured during the month prior to the president's speech. While a president's success in setting the public agenda is expected to increase along with their popularity ratings, the one study with evidence bearing on this question suggests popular presidents are no more influential than unpopular ones (Cohen 1995). *Honeymoon* was measured as a dummy variable differentiating the first year of the president's term from all other years. While there is evidence of a honeymoon phenomenon in the president's relationship with Congress (Rivers and Rose 1985), and in the public's evaluations of the president's performance (e.g. Kernell 1998), it is not know whether presidents are more successful in setting the public agenda early in their terms. Finally, the president's *margin of electoral victory* was calculated as the difference between the popular vote received by the president and the next closest candidate. Presidents elected by large margins may find the public agenda more responsive than presidents elected by small margins.

7. Control Variables

The models also include three control variables. First, in an effort to identify the most effective agenda setters, dummy variables were assigned to each of the *individual presidents*, except for Truman. With Truman as the excluded president, each dummy variable estimates the average change in issue salience during a given administration compared to the average change in salience during the Truman administration. Second, this study also controls for *survey lag*; the

[16] The criteria used to identify the presidential scandals included in this analysis are based on Mayhew (1996).

number of days between the president's speech and the poll measuring the public agenda. Although this study considers the influence of presidential rhetoric on the public agenda immediately after, and two, four, and six months after the speech, not all of the polls used in this study were conducted at precisely these intervals. Third, to control for any differences in the public agenda resulting from the data collection procedures used by different *survey organizations*, a dummy variable was included for each survey organization whose polls were used, except Gallup. With Gallup as the excluded organization, the dummy variable for Harris, for example, reflects the average change in issue salience when a Harris survey was used, compared to when a Gallup survey was used.

B. METHODOLOGY

The measures of presidential rhetoric, media coverage, contextual influences, and presidential resources were evaluated in a recursive structural equation model (SEM) using Maximum Likelihood Estimation.[17] The model is summarized graphically in Figure 1, and each of the equations comprising the model is provided in written form in Appendix B. The overall model not only evaluates the influence of presidential rhetoric on the public agenda, directly and indirectly through media coverage, but it also estimates the influence that contextual factors have on the rhetoric used by presidents in their State of the Union Addresses. SEM was selected as the preferred method for several reasons. First, it affords the ability to specify the type of relationship among independent variables in the model. Second, SEM allows the researcher to decompose the relationships between variables into direct, indirect, and total effects. Third, in

[17] MLE has been the preferred estimation technique in structural equation modeling, and has been shown to provide robust estimates under less-than-ideal conditions, particularly when sample sizes are small and the distribution of error terms does not conform to assumptions regarding normality (Hoyle 1995). All models were estimated using the statistical package AMOS version 4.01, developed by James Arbuckle.

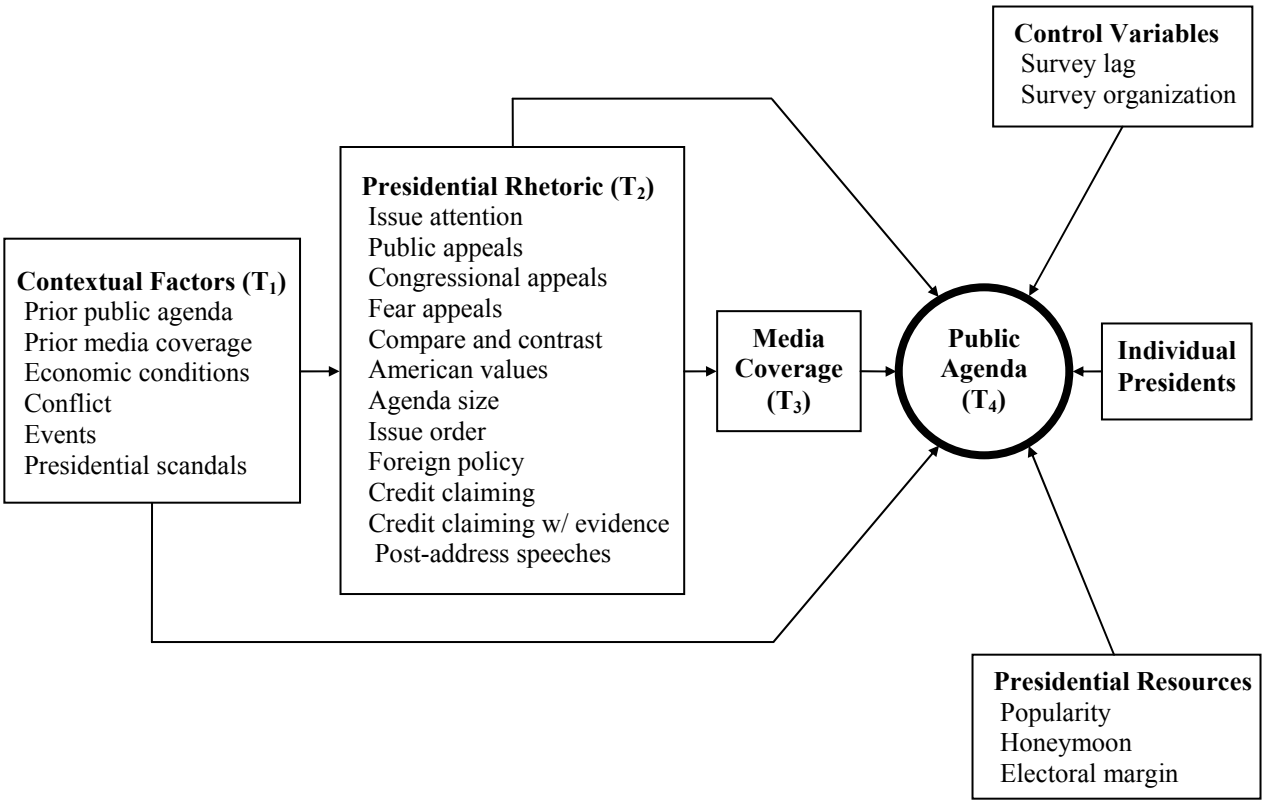

FIGURE 1. Contextual Factors, Presidential Rhetoric, Media Coverage, Presidential Resources, Individual Presidents, and the Public Agenda, 1946-2003

addition to tests of significance for individual variables, SEM also conducts goodness-of-fit tests, providing a measure of the degree to which the theoretical model fits the data. Finally, the flexibility of SEM permits the estimation of models which violate certain traditional assumptions (e.g. models with non-normal data, heterogeneous error variances, and correlated errors).

The use of a *recursive* specification was made possible by the temporal ordering of variables included in the system of equations. More specifically, in modeling the temporal dynamics of presidential agenda setting, there is strong reason to expect the public agenda (measured at T_4) to be responsive to (1) media coverage after the State of the Union Address (T_3), (2) presidential rhetoric in the State of the Union (T_2), (3) and contextual influences prior to the State of the Union (measured at T_1). In addition to being unnecessary, the specification of a nonrecursive model in this case would have presented a nearly impossible challenge given the difficulty of obtaining instrumental variables that are theoretically related to the public agenda, but *un*related to contextual factors, presidential rhetoric, and media coverage.

To estimate the influence of contextual influences on presidential rhetoric, each context variable was specified as a possible direct cause of every rhetoric variable, resulting in 13 separate equations. In modeling media coverage after the State of the Union, each context variable and each rhetoric variable was included as a potential direct cause of media coverage following the State of the Union. Each context variable was also included as a possible *indirect* cause of media coverage through every rhetoric variable. For example, prior media coverage was specified as a possible indirect cause of media coverage after the State of the Union, as mediated by issue attention, as mediated by issue justification, and so on, resulting in one additional equation. Finally, the model estimates the direct effects of presidential rhetoric, media coverage, contextual influences, and presidential resources on the public agenda. Also estimated were the

indirect effects of (1) each context variable as mediated by every rhetoric variable *and* media coverage, (2) and each rhetoric variable as mediated by media coverage after the State of the Union, resulting in one more equation and a total of 15 equations.

As specified, the model satisfies several critical assumptions required in the analysis of structural equation models. First, the use of a recursive system of equations demands a strong theoretical rationale for the direction of causal flow between variables. The justification for a recursive specification in the present model, as previously noted, is borne out of the temporal sequence of variables in the model. While media coverage *prior* to the State of the Union may affect the rhetoric used by presidents in their speeches, media coverage *after* the State of the Union cannot. Second, structural equation models are assumed to be "overidentified" such that the number of knowns (observed variable variances and covariances) is greater than the number of unknowns (parameters to be estimated). The greater the ratio of knowns to unknowns, the greater the number of degrees of freedom. Thus, the number of degrees of freedom serves as a general measure of the overidentification of a given model. The model tested here is overidentified with 381 available degrees of freedom. Third, structural equation models require relatively large samples, especially if the model is estimated using Maximum Likelihood. Stevens (1996) recommends a minimum of 15 cases per measured variable, Bentler and Chou (1987) suggest at least five cases per estimated parameter, and Loehlin (1992) advocates a minimum of 200 cases for most structural equation models. The present model features approximately 30 cases per variable, more than 10 cases per parameter, and a total of 1,113 cases. Finally, structural equation models assume complete data, or the appropriate handling of missing data. Because listwise and pairwise deletion of cases and mean substitution represent *ad*

hoc solutions to the missing data problem, missing values were replaced with predicted values using the Full Information Maximum Likelihood (FIML) method of data imputation.[18]

C. RESULTS

1. Presidential Rhetoric

Table 2 reports the results from the section of the overall model that estimates the direct effects of contextual factors on presidential rhetoric.[19] The results suggest that presidents give substantial weight to real-world conditions in their State of the Union rhetoric. First, when public concern about an issue is already high before the State of the Union Address, presidents are more likely to mention that issue, to justify its importance, and to mention the issue at the beginning of the address rather than the end. Preexisting concern about an issue also led presidents to claim credit for success in addressing that issue, perhaps in an attempt to convince the public that, as bad as the situation may be, some progress has been made. This finding is in accord with the research of Jacobs and Shapiro (2003) who argue that, while politicians are not responsive to public opinion when it comes to making major policy decisions, they do pay close attention to public opinion (through the use of polls and focus groups) in crafting their actions and statements designed to elicit public support. Research on public opinion is used to pinpoint the most alluring words, symbols, and arguments in attempt to move public opinion to support their desired policies. Thus, presidents employ "crafted talk" to create the appearance of responsiveness to public opinion, even as they set about the task of moving public opinion closer to their own

[18] The Full Information Maximum Likelihood (FIML) method of data imputation uses all of the information from all of the variables in the model to replace missing values with predictions based on observed characteristics. While this method of missing data replacement is far from perfect and may introduce error into the analysis, (FIML) is generally considered to be superior to listwise and pairwise deletion and mean substitution of missing values.

[19] Because it is impossible to display the results of the entire structural equation model in a single table, the results are presented in Tables 2 through 5 according to the section of the model to which they refer.

TABLE 2. The Influence of Contextual Factors on Presidential Rhetoric in the State of the Union Address, 1946-2003

Independent Variable	Issue Attention		Issue Justification		American Values		Congressional Appeals		Public Appeals	
Contextual Factors										
Prior public agenda	2.716***	(.749)	0.579***	(.178)	0.004	(.003)	0.037	(.049)	0.013	(.033)
Prior media coverage	3.061***	(.650)	5.587***	(1.54)	0.064	(.036)	0.180	(.423)	-0.270	(.290)
Economic conditions	1.418	(1.51)	0.042	(.357)	0.028***	(.007)	0.263**	(.098)	-0.040	(.067)
Military conflict	3.850*	(1.84)	0.260	(.400)	0.520***	(.120)	4.660***	(1.69)	1.478	(1.15)
Important events	4.640***	(1.37)	1.560	(.900)	-0.440	(.270)	3.500	(3.73)	-1.300	(2.50)
Presidential scandals	-2.450	(1.41)	4.790	(3.34)	0.040	(.070)	0.310	(.910)	-0.720	(.630)
N	1,113		1,113		1,113		1,113		1,113	
Squared multiple corr.	0.047		0.041		0.041		0.024		0.006	

Independent Variable	Agenda Size		Issue Order		Foreign Policy		Fear Appeals		Compare and Contrast	
Contextual Factors										
Prior public agenda	0.000	(.001)	-0.090***	(.027)	0.001	(.001)	0.072	(.075)	0.037	(.081)
Prior media coverage	0.004	(.004)	-0.707**	(.233)	0.006	(.009)	1.760**	(.660)	0.953	(.706)
Economic conditions	-0.010**	(.003)	-0.269***	(.054)	0.030**	(.001)	0.403**	(.151)	0.334*	(.161)
Military conflict	-0.152***	(.030)	0.330	(.630)	0.380***	(.020)	2.870	(1.75)	0.300	(.560)
Important events	0.060	(.100)	0.160	(.200)	0.070	(.070)	1.030	(.580)	4.300	(6.23)
Presidential scandals	-1.940*	(.820)	1.059*	(.506)	0.020	(.020)	1.920	(1.41)	2.430	(1.53)
N	1,113	(.117)	1,113		1,113		1,113		1,113	
Squared multiple corr.	0.048		0.088		0.288		0.020		0.010	

Independent Variable	Credit Claiming w/out Evidence		Credit Claiming w/ Evidence		Post-Address Speeches	
Contextual Factors						
Prior public agenda	1.132***	(.117)	0.496***	(.057)	0.002	(.002)
Prior media coverage	1.129	(1.01)	0.183	(.498)	0.010	(.011)
Economic conditions	0.034	(.018)	0.005	(.003)	0.002	(.003)
Military conflict	-3.990	(2.73)	-2.670*	(1.33)	0.005	(.003)
Important events	0.620	(.960)	4.050	(4.43)	0.360***	(.100)
Presidential scandals	-2.260	(2.20)	-1.280	(1.09)	0.010	(.020)
N	1,113		1,113		1,113	
Squared multiple corr.	0.094		0.094		0.018	

Note: Entries are unstandardized coefficients with standard errors in parentheses. Dependent variables are the presidential rhetoric variables. CFI= (immediately after) .957; (2 months after) .961; (4 months after) .956; (6 months after) .972. *p <.05; **p <.01; ***p <.001. Two-tailed.

desired preferences. So, in the context of the present study, presidents may react to public opinion deciding what issues to cover in their annual messages, but at the same time the rhetoric used to discuss those issues is designed to move the public's preferences on those issues closer to the president's position.

Second, media coverage of an issue before the State of the Union led presidents to mention that issue, to justify its importance, to warn the public of possible consequences if their position on the issue was not adopted, and to discuss the issue at the beginning of the address.

Third, during times of economic distress, presidents are more likely to appeal to Congress for action on economic issues, to warn of the consequences if their program for addressing economic issues was not adopted, to compare their policies for addressing the economy with policies proposed by others, and to associate their policies with American values. Moreover, in times of economic decline presidents are more likely to address economic issues at the beginning of their speech, to limit the size of their agendas, and to increase their attention to foreign policy issues, ostensibly in an attempt to shift the public's focus away from economic concerns.

Fourth, when the country is involved in military conflict presidents are *more* likely to mention foreign policy issues, to appeal to Congress on these issues, to associate these issues with American values, to limit the size of their agendas, and *less* likely to claim credit for success in addressing foreign policy issues.

Fifth, important events encouraged presidents to mention issues related to those events in the State of the Union Address and in speeches delivered during the week following the address.

Finally, when presidents were implicated in scandals at the time of the State of the Union Address, they were more likely to limit the number of issues covered in the address, and to relegate discussion of issues related to the scandal to the end of the address.

2. Media Coverage

Although millions of Americans do not watch the State of the Union Address, they may be influenced by the president's rhetoric indirectly by reading a newspaper article or watching television news programs that covered issues mentioned in the address. For this indirect path of influence to be satisfied, presidents must be able to affect media coverage with the rhetoric in their speeches. Table 3 illustrates the section of the overall model that estimates the direct effects of contextual factors and presidential rhetoric on media coverage after the president's speech. Media coverage after the speech was in fact heavily determined by both sources of influence. Prior media coverage, prior public concern, and important events during the month before the speech significantly affected the issues covered by the media immediately after and two, four, and six months after the speech. Also, the involvement of the United States in military conflict led the media to increase their coverage of foreign policy issues immediately after the speech.

In addition to the importance of contextual factors, presidents were able to increase media coverage of issues by simply devoting more attention to those issues, by associating those issues with American values, by focusing on foreign policy, and by giving speeches during the week after the State of the Union addressing those issues. Interestingly, presidents were also able to use their rhetoric to *decrease* media coverage of issues by citing evidence of progress made in addressing those issues. While each of the aforementioned variables influenced media coverage across the entire six month period after the speech, several other variables had more limited effects. Presidents were able to generate coverage of issues up to four months after the address by justifying the importance of those issues, up to two months after the address by referring to possible consequences if their plan for addressing those issues were not adopted, and immediately after the address by comparing their policies for with policies proposed by others.

TABLE 3. The Influence of Contextual Factors and Presidential Rhetoric on Media Coverage Following the State of the Union Address, 1946-2003

Independent Variable	Immediately After		2 Months After		4 Months After		6 Months After	
Contextual Factors								
Prior public agenda	0.048***	(.005)	0.101***	(.009)	0.190***	(.015)	0.271***	(.021)
Prior media coverage	0.336***	(.042)	0.698***	(.077)	1.340***	(.125)	1.882***	(.178)
Economic conditions	0.007*	(.003)	0.009	(.018)	0.042	(.029)	0.047	(.042)
Military conflict	0.100	(.130)	0.184	(.236)	0.393	(.385)	0.836	(.546)
Important events	2.248***	(.366)	2.951***	(.665)	4.634***	(1.09)	4.027***	(1.54)
Presidential scandals	0.012	(.089)	0.092	(.162)	-0.292	(.264)	0.403	(.374)
Presidential Rhetoric								
Issue attention	0.003***	(.001)	0.003***	(.001)	0.005***	(0.01)	0.007***	(.001)
Issue justification	0.007***	(.001)	0.007***	(.002)	0.009***	(.003)	0.009	(.006)
Public appeals	0.009	(.018)	0.010	(.008)	0.020	(.013)	0.009	(.023)
Congressional appeals	0.039	(.013)	0.004	(.006)	0.005	(.009)	0.036	(.016)
Fear appeals	0.004*	(.002)	0.003*	(.001)	0.003	(.006)	0.001	(.011)
Compare and contrast	0.005**	(.002)	0.003	(.003)	0.007	(.006)	0.005	(.011)
American values	0.102*	(.042)	0.172*	(.076)	0.336**	(.124)	0.435*	(.176)
Agenda size	-0.138	(.116)	0.026	(.212)	-0.093	(.346)	-0.043	(.490)
Issue order	-0.001	(.005)	0.004	(.025)	-0.002	(.006)	0.000	(.023)
Foreign policy	0.993***	(.140)	1.530***	(.217)	2.411***	(.443)	3.491***	(.615)
Credit claiming without evidence	-0.004	(.004)	-0.014	(.016)	-0.003	(.016)	-0.002	(.015)
Credit claiming with evidence	-0.009**	(.002)	-0.041**	(.015)	-0.024**	(.008)	-0.029**	(.008)
Post-address speeches	0.610***	(.115)	1.993***	(.523)	1.946***	(.520)	1.561***	(.484)
N	1,113		1,113		1,113		1,113	
Square multiple correl.	0.361		0.350		0.381		0.389	
Comparative Fit Index	0.957		0.961		0.956		0.972	

Note: Entries are unstandardized coefficients with standard errors in parentheses. The dependent variable is Media Coverage immediately after, 2 months after, 4 months after, and 6 months after the State of the Union Address. *p<.05; **p<.01; ***p<.001. Two-tailed.

3. The Public Agenda

Table 4 displays the results from the portion of the overall model that estimates the influence of contextual factors, presidential rhetoric, and media coverage on the public agenda. The results clearly establish the value of presidential rhetoric as an instrument for priming issues in the minds of the public. Presidents increased public concern about certain issues simply by devoting more attention to those issues. The maximum number of words used by any president to discuss an issue was 1907. When presidents employed the full range of issue attention, they were able to increase the salience of issues by an average of between 6%, from just before to immediately after the speech, and 11%, from just before the speech to two, four, and six months after the speech.[20] Although presidents rarely approached 1907 words in their discussion of an issue, this finding nevertheless underscores the latent power of presidential rhetoric available to presidents who focus their attention on their administration's most important priorities. Second, when presidents relied on substantive justifications of the importance of issues to the fullest extent observed (389 words), they were able to increase the salience of issues by 4% across the six month period after the speech. Third, and somewhat surprisingly, presidential appeals to Congress, but not the public, were emphasized in evaluations of issue salience. Presidents who appealed to Congress to the maximum extent observed (120 words) were able to increase the salience of issues by an average of between 4%, from just before to two, four, and six months after the speech, and 5%, from just before to immediately after the speech. Presidents were also able to increase the salience of issues by focusing on foreign policy, by limiting the number of

[20] Substantive effects were calculated by multiplying the unstandardized coefficient for a rhetorical appeal by the maximum number of words used to issue that appeal. For issue attention immediately after the speech, the coefficient of .003 was multiplied by the maximum observed value for issue attention (1907 words), yielding a product of 10%.

TABLE 4. The Influence of Contextual Factors, Presidential Rhetoric, Media Coverage, Presidential Resources, and Individual Presidents on the Public Agenda, 1946-2003

Independent Variable	Immediately After		2 Months After		4 Months After		6 Months After	
Contextual Factors								
Prior public agenda	0.057***	(.021)	0.066***	(.020)	0.169***	(.024)	0.090***	(.003)
Prior media coverage	0.589*	(.177)	0.456*	(.197)	0.493*	(.199)	0.312*	(.149)
Economic conditions	0.143***	(.040)	0.066*	(.031)	0.099*	(.045)	0.080*	(.034)
Military conflict	0.540*	(.360)	0.511	(.584)	0.828	(.583)	0.334	(.664)
Important events	1.260	(1.56)	2.327	(1.66)	2.241	(1.65)	2.604	(1.88)
Presidential scandals	1.830*	(.778)	1.601*	(.761)	1.380	(1.40)	1.113	(1.45)
Presidential Rhetoric								
Issue attention	0.003*	(.001)	0.005***	(.002)	0.005***	(.001)	0.006***	(.001)
Issue justification	0.010***	(.002)	0.011**	(.005)	0.010**	(.003)	0.007	(.004)
Public appeals	0.009	(.018)	0.001	(.002)	0.015	(.020)	0.009	(.023)
Congressional appeals	0.039**	(.013)	0.030*	(.014)	0.036*	(.014)	0.364*	(.161)
Fear appeals	0.002	(.009)	0.017	(.010)	0.013	(.010)	0.001	(.010)
Compare and contrast	-0.006	(.008)	0.003	(.008)	0.013	(.008)	0.004	(.010)
American values	0.148	(.170)	0.041	(.189)	0.318	(.189)	0.054	(.215)
Agenda size	-1.440**	(.481)	-1.540**	(.530)	-1.913***	(.524)	-1.111***	(.595)
Issue order	-0.051*	(.022)	0.004	(.025)	0.005	(.025)	0.021	(.028)
Foreign policy	-1.830**	(.582)	1.400*	(.674)	2.124***	(.667)	0.874	(.758)
Credit claiming without evidence	-0.020**	(.072)	-0.034***	(.008)	-0.026**	(.008)	-0.024**	(.009)
Credit claiming with evidence	-0.044***	(.014)	-0.014	(.016)	-0.003	(.016)	-0.022	(.018)
Post-address speeches	2.630***	(.473)	2.306***	(.523)	2.071***	(.520)	1.564**	(.481)
Media Coverage	0.742***	(.122)	0.353***	(.074)	0.101*	(.045)	0.119**	(.036)
Presidential Resources								
Popularity	0.001	(.001)	0.001	(.003)	0.002	(.003)	0.001	(.001)
Electoral margin	0.036	(.034)	0.054	(.038)	0.021	(.039)	0.045	(.044)
Honeymoon	0.895*	(.381)	0.487	(.413)	0.084	(.402)	0.302	(.494)
Individual Presidents								
Eisenhower	0.551	(.921)	-1.506	(.801)	-0.055	(.161)	-0.944	(1.15)
Kennedy	0.523	(.969)	0.881	(.499)	2.106	(1.30)	1.043	(1.43)
Johnson	0.758	(.904)	0.185	(.165)	1.784	(1.24)	1.251	(1.21)
Nixon	1.504	(.961)	-0.854	(1.27)	-1.142	(.777)	-0.574	(1.07)
Ford	1.747	(1.00)	1.546	(1.75)	-0.974	(.941)	0.063	(1.25)
Carter	2.270*	(0.91)	1.139	(.689)	0.646	(1.05)	1.847	(1.12)
Reagan	2.742***	(.830)	1.982	(1.05)	2.271	(1.52)	1.616	(1.26)
Bush I	2.886*	(1.15)	1.391	(.714)	1.292	(.728)	1.354	(.996)
Clinton	2.861**	(.950)	1.464	(.891)	1.757	(.904)	0.101	(.910)
Bush II	3.563***	(1.11)	2.377	(1.72)	2.101	(1.30)	0.823	(1.32)
N	1,113		1,113		1,113		1,113	
Comparative Fit Index	0.957		0.961		0.956		0.972	
Squared multiple correl.	0.747		0.742		0.638		0.609	

Note: Entries are unstandardized coefficients with standard errors in parentheses. The dependent variable is the Public Agenda immediately after, 2 months after, 4 months after, and 6 months after the State of the Union Address. *p<.05; **p<.01; ***p<.001. Two-tailed.

issues discussed, by covering important issues at the beginning of the speech, and by reinforcing the importance of issues in speeches given during the week after the State of the Union.

The results also portray presidents as particularly effective in convincing the public that certain issues are no longer a cause for concern. When presidents relied on credit claiming to the fullest extent observed (331 words), they were able to reduce concern about selected issues by an average of between 7%, from just before to immediately after the speech, and 11%, from just before to two months after the speech. Presidents were able to boost the effectiveness of their credit claiming efforts by citing evidence of progress in dealing with an issue. When presidents invoked credit claiming to the fullest extent (229 words), they were able to reduce the salience of issues by 10% from just before to immediately after the president's speech. The limited duration of this effect suggests that the evidence accompanying credit claiming is subtle and difficult for the public to recall beyond the period of time immediately after the speech. It should be pointed out that the effects of presidential rhetoric in this study are somewhat larger than those found in previous research that examines the entire range of presidential rhetoric (e.g. Edwards and Wood 1999; Wood and Peake 1998). Perhaps the stronger effects uncovered here can be explained by the fact that more citizens tend to watch the State of the Union than other speeches. From this perspective, the results underscore the value of the State of the Union Address as a tool for influencing the public agenda, at least in comparison to other speeches that attract smaller audiences. Finally, while substantial evidence suggests presidents use military force as a strategy to divert the public's attention away from unpopular issues (e.g. Brace and Hinckley 1992), the results here suggest presidents need not resort to such extreme measures. Presidents are able to use their rhetoric to shift public attention away from unpopular or controversial issues.

Finally, presidents were more effective in setting the public agenda early in their terms, at least immediately after their speech. The results also reveal that presidents since Ford were more effective agenda setters than Truman immediately after their speech. What the results do not reveal is why. Have presidents learned from their predecessors about which rhetorical strategies work and which do not, or has the public simply become more attuned to presidential rhetoric over time, or both? While interesting, these questions lie beyond the scope of this study.

In addition to the influence of presidential rhetoric, the public agenda was also affected by the public agenda before the speech, by economic conditions at the time of the speech, and by media coverage before and after the speech. Also, the involvement of the country in military conflict resulted in increases in the salience of foreign policy and defense issues. Finally, the implication of presidents in scandals heightened the salience of issues related those scandals.

4. Context Versus Rhetoric

Comparisons of the influence resulting from contextual factors and presidential rhetoric are shown in Table 5. Discussion to this point has focused on the direct effects of presidential rhetoric and contextual factors. In order to evaluate the relative importance of presidential rhetoric and contextual factors as determinants of the public agenda, this section considers the direct, indirect, and total effects of these variables. First, as the results in Table 5 demonstrate, the influence of contextual factors is generally greater than that of presidential rhetoric, although not substantially so. In fact, contextual factors and presidential rhetoric both remain important determinants of the public agenda during the entire six month period following the State of the Union Address. Second, the direct effects of presidential rhetoric and contextual factors were strongest immediately after the State of the Union, when the president's speech and environmental conditions were still fresh in the minds of the public. Third, as the amount of time

TABLE 5. The Direct, Indirect, and Total Effects of Contextual Factors and Presidential Rhetoric on the Public Agenda, 1946-2003

	Immediately After			2 Months After			4 Months After			6 Months After		
Independent Variable	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
Contextual factors	0.19	0.08	0.27	0.05	0.12	0.17	0.05	0.08	0.13	0.03	0.11	0.14
Presidential rhetoric	0.21	0.02	0.23	0.05	0.09	0.14	0.03	0.07	0.10	0.02	0.07	0.09

Note: Entries are standardized coefficients. The coefficients for contextual factors represent the combined effects of all six contextual factors on the public agenda - directly and indirectly through presidential rhetoric and media coverage. The coefficients for presidential rhetoric represent the combined effects of all 13 presidential rhetoric variables on the public agenda - directly and indirectly through media coverage.

since the speech increased, the indirect effects of presidential rhetoric (through media coverage) and contextual factors (through presidential rhetoric and media coverage) became more pronounced. While much of the influence of presidential rhetoric immediately after the speech is felt directly among those who watched the speech, the influence of presidential rhetoric two, four, and six months after the speech is predominantly *in*direct, resulting from an influence on the issues covered by the media after the speech. Previous research has not investigated the media's role in presidential attempts to set the public agenda. As a result, the literature misses much of the influence of presidential rhetoric uncovered here, a fact that also helps to explain the somewhat larger effects of presidential rhetoric found in this study, compared to the more modest effects found in other studies (e.g. Edwards and Wood 1999; Wood and Peake 1998).

D. EVALUATING PRESIDENTIAL RHETORIC

The results of all the models bearing on the influence of presidential rhetoric are summarized in Table 6. In particular, they emphasize the persuasive power of issue attention, issue justification, foreign policy, post-address speeches, and credit claiming as agenda setting strategies on *both* media coverage and the public agenda. Also, while credit claiming *with*

evidence influenced media coverage, credit claiming *without* evidence influenced the public agenda. Interestingly, presidents were able to limit the size of their agendas and appeal to Congress for legislative action as a way to set the public agenda, but *not* the media agenda. Not unexpectedly, the agenda size variable suggests that public appears to have a more limited attention span for politics than do the mass media, whose job requires them to cover political events such as the State of the Union Address. Conversely, presidents used fear appeals and appeals to American values to influence media coverage, but *not* aggregate-level assessments of the public agenda. Whether fear appeals are capable of influencing evaluations of issue salience at the individual level is one of several questions addressed below in Study 2.

In order to place the results of Study 1 in context, it is important to note that much of the previous research on presidential agenda setting focuses on a limited number of salient issues, is restricted to just a few administrations, and does not model the duration of the president's influence on either the public or the media agenda. Most importantly, the literature offers presidents little advice as to what specific rhetorical strategies are most likely to enhance the president's influence. This study identifies and estimates the influence of several forms of presidential rhetoric on the salience of 1,113 issues, salient and nonsalient, across 11 presidential administrations, across the 6 month period following the State of the Union Address.

TABLE 6. Summary Table for Study 1: The Influence of Presidential Rhetoric on Media Coverage and the Public Agenda, 1946-2003

	Media Coverage				*Public Agenda*			
Independent Variable	Immediately After	2 Months After	4 Months After	6 Months After	Immediately After	2 Months After	4 Months After	6 Months After
Presidential Rhetoric								
Issue attention	✓	✓	✓	✓	✓	✓	✓	✓
Issue justification	✓	✓	✓	×	✓	✓	✓	×
Credit claiming w/out evi.	×	×	×	×	✓	✓	✓	✓
Credit claiming w/evi.	✓	✓	✓	✓	✓	×	×	×
Public appeals	×	×	×	×	×	×	×	×
Congressional appeals	×	×	×	×	✓	✓	✓	✓
Fear appeals	✓	✓	×	×	×	×	×	×
American values	✓	✓	✓	✓	×	×	×	×
Compare and contrast	✓	×	×	×	×	×	×	×
Foreign policy	✓	✓	✓	✓	✓	✓	✓	×
Agenda size	×	×	×	×	✓	✓	✓	✓
Issue order	×	×	×	×	✓	×	×	×
Post-address speeches	✓	✓	✓	✓	✓	✓	✓	✓

Note: This table summarizes the results from the models in Study 1 that estimate the influence of presidential rhetoric on Media Coverage and the Public Agenda. Checkmarks denote statistically significant variables, Xs denote nonsignificant variables.

VI. STUDY 2: PRESIDENTIAL RHETORIC AND INDIVIDUAL-LEVEL EVALUATIONS OF ISSUE SALIENCE

A. INTRODUCTION

Study 2 considers the impact individual attitudes have on the relationship between presidential rhetoric and the public agenda. While Study 1 offers insight into the aggregate-level response to presidential rhetoric, such an analysis is likely to miss much of the variation in individual reactions to presidential speeches. These differences may cancel out, or simply be undetectable, in studies that rely exclusively on data collected at the aggregate level. As a result, Study 1 is incapable of determining whether all respondents are equally susceptible to the influence of a president's rhetoric. The available evidence indicates that certain attitudes, such as presidential approval and partisan identification, can play a critical role in determining whether presidential speeches succeed in influencing the public's policy preferences (e.g. Meernik and Ault 2001; Page, Shapiro and Dempsey 1987; Page and Shapiro 1992). But it is much less clear whether such attitudes influence the dynamics of presidential agenda setting. Relying on individual-level survey data collected immediately after four State of the Union Addresses delivered by four different presidents, Study 2 estimates the relationship between presidential rhetoric and the public agenda as a function of exposure to the president's speech, presidential support, political predispositions, and demographic characteristics.

B. HYPOTHESES

The results of Study 1 show that aggregate-level perceptions of issue importance are significantly influenced by the rhetoric used by presidents in their State of the Union Address. However, not all respondents are likely to be equally influenced by presidential rhetoric. Estimated below is the influence of several moderators of the relationship between presidential rhetoric and the public agenda. Respondents who watched the president's speech, who supported the president, whose political predispositions were consonant with the president's, and who belonged to demographic groups in the coalition of the president's party, are all expected to be more responsive to presidential rhetoric than respondents who did not share these characteristics.

1. Exposure to the President's Speech

Before exploring the importance of presidential support, political predispositions, and demographic characteristics, it is appropriate to first consider, in an acid-test of presidential rhetoric, whether those who saw the president's speech were more influenced by the president's rhetoric than those who did not. Respondents' opinions concerning the importance of issues are no doubt informed by numerous sources- including the news media, important events, and economic conditions, to name just a few. But if presidential rhetoric matters, then the evaluations of issue salience expressed by respondents who actually watched the president's speech should be more influenced by the president's rhetoric than the evaluations of issue salience expressed by respondents who did not watch the president's speech. Formally stated,

> *H1: The influence of presidential rhetoric on the public agenda is expected to be greater among respondents who watched the president's speech than among respondents who did not watch the president's speech, ceteris paribus.*

Whereas Hypothesis 1 asks if presidential rhetoric is in fact more important for those who did see the president's speech than for those who did not, Hypotheses 2 through 7 are designed to

determine which respondents among those who *did* watch the speech are likely to be most receptive to a president's rhetoric. Thus, tests of these hypotheses were conducted using a sample consisting only of those respondents who saw the president's speech.

2. Presidential Support

A great deal of research speaks to the crucial role played by presidential evaluations in determining whether presidents are able to influence the public. The available evidence indicates presidents are more effective in using their speeches to influence the public's policy preferences when approval of their performance exceeds 50% (Page, Shapiro and Dempsey 1987; Page and Shapiro 1992), and when respondents express a strong psychological identification with the president (e.g. Thomas and Sigelman 1985). It is less clear whether such attitudes influence a president's ability to set the agenda. Considered here are two different measures of presidential support: presidential vote choice, and presidential approval. Those who voted for the president in the last election and expressed approval of the president's performance are expected to be more receptive to a president's rhetoric than respondents who did not vote for the president and expressed disapproval of the president's performance. Formally stated,

> *H2: The influence of presidential rhetoric on the public agenda is expected to be greater among respondents who voted for the president than among respondents who did not vote for the president, ceteris paribus.*
>
> *H3: The influence of presidential rhetoric on the public agenda is expected to be greater among respondents who expressed approval of the president's performance than among respondents who expressed disapproval of the president's performance, ceteris paribus.*

3. Political Predispositions

Beginning with *The American Voter* (Campbell et al. 1960), a venerable tradition of research has underscored the importance of political predispositions as explanatory variables in the analysis of political behavior. Party identification and ideological orientation have

consistently been revealed as important determinants in a variety of political decision making contexts- including voting decisions, support for public policies, and evaluations of the president's performance. Whether these political predispositions impact a president's ability to set the agenda, however, remains open to question. It is expected that liberals and Democrats will be more willing to consider the rhetoric of Democratic presidents, and conservatives and Republicans more willing to rely on the rhetoric of Republican presidents. Formally stated,

> *H5: The influence of presidential rhetoric on the public agenda is expected to be greater among respondents with same party identification as the president than among respondents with the opposite party identification of the president, ceteris paribus.*
>
> *H4: The influence of presidential rhetoric on the public agenda is expected to be greater among respondents with the same ideological orientation as the president than among respondents with the opposite ideological orientation of the president, ceteris paribus.*

4. Demographic Characteristics

The allegiances of demographic groups to the Democratic Party have their roots in the New Deal coalition forged by Franklin Roosevelt and the efforts of his administration to combat the Great Depression. The passage of the Social Security Act in 1935, which provided unemployment insurance and assistance to the needy, went a long way toward ensuring the support of the poor. Urban residents were brought into the Democratic fold in part by recovery programs which provided large cities with new schools, hospitals, water and sewer systems, and bridges and roads. The loyalty of organized labor was secured by the Wagner Act of 1935, which guaranteed to labor the right to collectively bargain on equal terms with management, and the Fair Labor Standards Act of 1938, which established minimum wages and child labor laws (Davis 1986). Although Roosevelt was able to win the support of some African-Americans with the relief provided by New Deal reforms, the emergence of African-Americans as strong supporters of the Democratic Party was not fully realized until the 1960s. Hitherto, the

Republican Party – the party of Lincoln, the Civil War, and Reconstruction – had been associated with racial equality. But the commitment of Presidents Kennedy and, especially, Johnson to the civil rights movement, coupled with the Republican nomination of racial conservative Barry Goldwater in 1964, persuaded many African-Americans to switch their support from the Republican Party to the Democratic Party (Carmines and Stimson 1989). Taken together, these demographic groups – the poor, urban residents, members of labor unions, and African-Americans – constitute the Democratic coalition. Just as these groups have been steadfast supporters of Democratic candidates and policies, it is hypothesized that respondents from these demographic groups are also likely to give substantial weight to the rhetoric of Democratic presidents in deciding which issues they believe to be most important. Formally stated,

> *H6: The influence of a Democratic president's rhetoric on the public agenda is expected to be greatest among respondents who belonged to all 4 groups in the Democratic coalition, and weakest among respondents who belonged to no groups in the Democratic coalition, ceteris paribus.*

The Republican Party has long been recognized as the party of the business and professional classes. The substance behind this image can be traced all the way back to the social and economic disparities that underlay the battles between the wealthy, aristocratic Federalists and the less privileged Democratic-Republicans. These differences became even more pronounced in the conflicts between the Jacksonian Democrats and the Whigs a few decades later, and surfaced yet again in the 1896 presidential election between William McKinley and the anti-establishment candidate, William Jennings Bryan (Hershey and Beck 2003). Evidence of these differences can be found today, as those with high incomes are more likely to identify with the Republican Party than those with low incomes. Furthermore, because the Republican Party led the Union cause in the Civil War and favored rights for former slaves, most white

southerners opposed the GOP. But as the Democratic Party embraced a burgeoning civil rights movement and the Republican Party favored increasingly conservative positions on racial issues, white southerners abandoned the Democratic Party in favor of the Republican Party. Finally, despite the diversity of sects and orientations Protestantism embraces, the theological individualism of more conservative Protestantism predisposes Protestants to embrace Republicanism (Beck and Sorauf 1992). In recent years, however, it has been the political conservatism of Protestant fundamentalists, anchored to issues such as abortion and school prayer, which has stimulated Protestant enthusiasm for the GOP (Hershey and Beck 2003). Thus, the wealthy, whites, southerners, and Protestants form the Republican coalition. While these groups have extended generous support to Republican candidates and policies, it is hypothesized that respondents from these demographic groups are also likely to place considerable importance on the rhetoric of Republican presidents in their decisions of what issues they believe are the most important. Formally stated,

> *H7: The influence of a Republican president's rhetoric on the public agenda is expected to be greatest among respondents who belonged to all 4 groups in the Republican coalition, and weakest among respondents who belong to no groups in the Republican coalition, ceteris paribus.*

C. RESEARCH DESIGN

1. Data and Sample

Study 2 is based on a pooled dataset composed of individual-level data from four different public opinion surveys, each conducted immediately following a president's State of the Union Address. The first survey was conducted after Ronald Reagan's 1982 address, the used in this study. Each of the surveys selected was conducted immediately following the State of the Union Address, each includes a question that asks respondents which issue they believe

represents the most important problem facing America, and each of the surveys contains items necessary for testing the proposed hypotheses.

The units of analysis are issues. The first 12 cases represent the first respondent's evaluation of the salience of the 12 issues discussed by Reagan in his 1982 speech. The next 12 cases represent the second respondent's evaluation of the salience of the same 12 issues. And so on. The 1982 survey consists of a total of 754 respondents, resulting in a subtotal of 9,048 cases. The 1992 survey features 1,512 respondents' evaluations of the 24 issues discussed by George H.W. Bush, resulting in an additional 36,288 cases. The 1994 survey features 1,013 respondents' evaluations of the 16 issues mentioned by Clinton, increasing the number of cases by 16,208. The 2001 survey includes 1,449 respondents' evaluations of the 14 issues mentioned by George W. Bush, resulting in 20,286 more cases, and a total of 81,830 cases. Because of the relatively large sample involved, all tests of statistical significance were conducted at the .01 level.

2. The Public Agenda

The public agenda serves as the dependent variable in all subsequent analyses and consists of individual responses to the question, "What is the most important problem facing America today?" If a respondent identified an issue mentioned by the president as the most important facing America, a value of "one" was recorded for the dependent variable corresponding to that issue. For all other issues mentioned by the president that were not identified as the most important, a value of "zero" was recorded for the dependent variable corresponding to those issues. The dependent variable thus represents each respondent's perception of the importance of every issue mentioned in the president's speech.

3. Presidential Rhetoric

Of primary interest is the influence of presidential rhetoric on the public agenda- both directly, and as moderated by exposure to the president's speech, presidential support, political predispositions, and demographic characteristics. The presidential rhetoric variables included in this study are the same as those examined in Study 1, with one exception.[21] The influence of a moderator on the relationship between presidential rhetoric and the public agenda was estimated by creating interaction terms between that moderator and each presidential rhetoric variable, resulting in a total of 12 interaction terms. The *un*interacted presidential rhetoric variables estimate the direct influence of a given form of presidential rhetoric on the public agenda. Descriptive statistics for the presidential rhetoric variables and each of the moderators described below are included in Table C1 in Appendix C.

4. Exposure to the President's Speech

Exposure to the president's speech was measured using a single item that asked respondents whether watched the State of the Union Address. Respondents who reported watching the speech were assigned a "one," while those who did not see the speech were assigned a "zero." Of those surveyed, 47% of respondents watched Reagan's 1982 address, 60% reported seeing George H.W. Bush's 1992 address, 54% indicated they saw Clinton's 1994 address, and 52% said they watched George W. Bush's 2001 address.

5. Presidential Support

Two measures of presidential support were included in the study. The first, presidential vote choice, was coded as "one" for respondents who said they voted for the president in the last

[21] Post-address speeches were not included in the models estimated in Study 2 because each of the four surveys was conducted immediately after the State of the Union Address, before any post-address speeches were given.

election, and a "zero" for those who did not vote for the president.[22] The second, presidential approval was coded as "one" for those who approved of the president's performance and a "zero" for those who disapproved of the president's performance.

6. Political Predispositions

Measures of party identify identification and ideological orientation were used to determine respondents' political predispositions. Respondents who reported the same party identification as the president were coded as a "one," respondents reporting an identification with the opposite party of the president were assigned a "zero," and Independents were coded as missing data. For example, in the survey conducted after Clinton's 1994 address, Democrats (strong Democrat, Democrat, leaning Democrat) were assigned a "one," and Republicans (strong Republican, Republican, leaning Republican) were coded as "zero."

Similarly, respondents who reported the same ideological orientation as the president were coded as "one," those reporting the opposite ideological orientation from the president were assigned a "zero," and moderates were coded as missing data. As an illustration, in the survey conducted after Reagan's 1982 speech, conservatives (very conservative, conservative, somewhat conservative) were coded as "one," and liberals (very liberal, liberal, somewhat liberal) were assigned a "zero."[23]

[22] Respondents who were too young to have voted in the last presidential election were coded as missing data from the model that examines the effect of exposure to the president's speech. The percentages of respondents excluded were: 5% in the 1982 survey, 8% in the 1992; 7% in 1994; and 8% in 2001.

[23] Ideally, the partisan and ideology measures would have been coded as continuous measures. However, the data for this question in the 1982 and 1994 surveys were limited to just 3 response categories: Republican/conservative, Independent/moderate, Democrat/liberal. As a result, the continuous ideology and party measures from the other 2 surveys (1992, 2001) were collapsed to ensure these measures were coded consistently across all 4 surveys.

7. Demographic Characteristics

The demographic groups included in the Democratic coalition include the poor,[24] urban residents,[25] members of labor unions,[26] and African-Americans.[27] The demographic groups in the Republic coalition consist of the wealthy,[28] whites,[29] southerners,[30] and Protestants.[31] The Democratic and Republican coalition variables were created by summing the individual group measures, resulting in five-point scales that record the total number of groups to which a respondent belongs. For example, poor African-American urban residents employed by labor unions were assigned a "four," while respondents belonging to none of these groups were assigned a "zero."

8. Contextual Factors

To control for the influence of contextual factors on the public agenda, this study includes variables for the prior public agenda, prior media coverage, events, and economic conditions. As in Study 1, the *prior public agenda* was measured as the percentage of respondents who believed each issue mentioned in the State of the Union Address was the most important facing America measured during the month prior to the address. *Prior media coverage* was defined as the number of stories addressing each issue mentioned in the State of the Union Address that appeared on the front page of the New York Times during the month preceding the president's address. The *important events* variable was measured as the total number of events that occurred relevant to each issue mentioned in the State of the Union Address during the

[24] Poor: (1=respondents with household income in the bottom 20% of all respondents; 0=all other respondents)
[25] Urban residents: (1=urban residents; 0= all other respondents)
[26] Labor union members: (1=union members; 0=non-union members)
[27] African-Americans: (1=African-Americans; 0=all other races)
[28] Wealthy: (1=respondents with household income in top 20% of all respondents; 0=all other respondents)
[29] Whites: (1=whites; 0=all other races)
[30] Southerners (1= residents of the South; 0=residents of other regions)
[31] Protestants: (1=respondents of Protestant denomination; 0=all other denominations)

month prior to the president's speech.[32] The *economic conditions* measure was operationalized, as in Study 1, as an interaction between a misery index combining inflation and unemployment and an economic dummy variable that specifies each issue mentioned by the president as either economic or non-economic. The resulting interaction term was intended to estimate the influence of economic conditions on the salience of economic issues. Worsening economic conditions are expected to result in the heightened salience of economic issues.

9. Individual Presidents

Finally, to account for any differences in the influence of rhetoric across *individual presidents* included in this study, three dummy variables were included, one for each president except Reagan. Each dummy variable estimates the average change in the salience of issues mention in a given speech, compared to average change in the salience of issues mentioned by Reagan in his 1982 speech. For example, the dummy variable for George H.W. Bush represents the average change in the salience of issues mentioned in his 1992 speech, compared to the average change in the salience of issues mentioned by Reagan in his 1982 speech.

D. METHODOLOGY

1. Exposure to the President's Speech (Hypothesis 1)

One way to evaluate the merits of Hypothesis 1 is to simply compare the influence of presidential rhetoric among those who saw the president's speech with the influence of presidential rhetoric among those that did not see the speech. The fatal flaw in this method is found in the problem of selection bias. As research reveals (e.g. Edwards 2003; Welch 2000; 2002), those who watch the State of the Union Address are often predisposed to agree with the

[32] The criteria used for the selection of important events are the same as those used in Study 1.

president. As a result, respondents who choose to watch presidential speeches may be more receptive to a president's rhetoric than respondents who choose not watch such speeches. Fortunately, statistical techniques are available to overcome this problem. One of the most popular approaches to dealing with selection bias is the Heckman (1976, 1979) two-step procedure.

The first step of the Heckman procedure involves estimating a "Selection Model," a multiple logistic regression analysis of the decision to watch the president's speech. The explanatory variables required for this model include factors that are related to the decision to watch the president's speech, but *un*related to the public agenda. The explanatory variables selected include a measure of partisan intensity,[33] a measure of ideological intensity,[34] a four-point scale of political involvement,[35] a measure of the respondent's level of education,[36] and an age[37] variable. Politically involved respondents with intense partisan and ideological views are expected to be more likely to watch the president's speech than respondents who do not share these characteristics. Also, highly educated respondents are considered to be more motivated to seek out the sort of political information discussed by presidents in the State of the Union Address (Delli Carpini and Keeter 1992; Popkin 1991; Welch 2000). Finally, given their comparatively low levels of engagement in the political process, respondents aged 18 to 21 are expected to be *less* likely to watch the State of the Union Address than respondents above the age of 21. However, it is not the effects of these variables that are of primary interest, since these

[33] Partisan intensity: (1=strong Democrats/Republicans; 0=all other respondents).
[34] Ideological intensity: (1=strong liberals/conservatives; 0=all other respondents).
[35] Political involvement: The four-point scale was constructed by combining responses to three items. The first asked respondents whether or not they are registered to vote (1=registered; 0=not registered). Responses indicating registration was not a requirement were coded as missing data. The second item asked respondents whether or not they voted in the last presidential election (1=voted; 0=did not vote). The third item asked respondents whether or not they were interested in politics (1=somewhat or very interested; 0=not very or not at all interested).
[36] Education: (4=advanced degree; 3=bachelor's degree; 2=high school graduate; 1=less than high school).
[37] Age: (1=respondents 18-21 years old; 0=respondents over 21 years old).

variables are readily available to include as control variables in the second step of the Heckman procedure. Rather, it is the effects of the *unmeasured* characteristics of respondents on the decision to watch the speech that are of most importance. Although this information is not included in the coefficients for the explanatory variables, it is available in the residuals calculated by the logistic regression model. After all, the variation in the dependent variable that remains after accounting for the effects of known factors can only be caused by unknown factors. To complete the first step, the residuals are used to calculate a selection bias control factor, lambda, defined as the Inverse Mills Ratio (IMR). This summary measure includes the effects of all unmeasured characteristics of respondents that are related to the decision to watch the speech.

The second step of the procedure involves the estimation of a "Regression Model" using multiple logistic regression analysis. This is the model used to test Hypothesis 1, and includes lambda, the selection bias control factor. Because this control factor captures the effects on the public agenda of unmeasured characteristics related to the decision to watch the president's speech, the other independent variables in the model are freed from these effects, and the logistic regression analysis produces unbiased coefficients for them. A more detailed description of the Heckman two-step procedure employed in this study is provided in Appendix D.

In order to test the moderating influence of exposure to the president's speech, as specified in Hypothesis 1, several interaction terms were included in the Regression Model (Jaccard 2001). The interaction terms are between the moderator, exposure to the president's speech, and each presidential rhetoric variable, resulting in a total of 12 interaction terms. For example, a statistically significant interaction between *exposure to the president's speech* and *issue attention* indicates that those who saw the president's speech were more influenced by the length of the president's discussion of an issue than respondents who did not see the speech.

2. Presidential Support, Political Predispositions, and Demographic Characteristics (Hypotheses 2 through 7)

Whereas Hypothesis 1 predicts presidential rhetoric will matter more among those who saw the speech than among those who did not, Hypotheses 2 through 7 suggest those who did see the speech are more likely to be influenced by presidential rhetoric if they voted for the president, approved of the president's performance, shared the same partisan and ideological predispositions with the president, and if they belonged to demographic groups in the coalition of the president's party. As such, testing of these hypotheses was conducted with a sample that includes *only* respondents who saw the president's speech. As with Hypothesis 1, Hypotheses 2 through 7 were tested by creating interaction terms between the moderator in question and each presidential rhetoric variable. For example, a statistically significant interaction between *presidential vote choice* and *congressional appeals* indicates those who voted for the president gave more weight to the president's appeals to Congress in their assessments of issue salience than respondents who did not vote for the president. The models testing Hypotheses 2 through 7 were all estimated using multiple logistic regression analysis.

E. RESULTS

1. Exposure to the President's Speech

The results of the Heckman two-step procedure appear in Tables 7 and 8. They reveal each of the explanatory variables in the Selection Model to be strong, statistically significant predictors of the decision to watch the State of the Union Address. Educated respondents above the age of 21 with intense partisan and ideological views who were highly involved in politics were substantially more likely to watch the president's speech than respondents who did not share these characteristics. The odds ratios in Table 7 demonstrate the influence of a one-unit

increase in the value of an independent variable on the odds that a respondent watched the State of the Union Address. The results indicate that respondents with intense partisan views were an average of 10% more likely to watch the president's speech, and respondents with intense ideological views were an average of 12% more likely to watch the speech. Also, for each one-unit increase on the 4-point scale of political involvement, respondents were an average of 16% more likely to watch the State of the Union Address. Thus, respondents with a maximum score on the 4-point scale of political involvement were an average of 64% more likely to watch the president's speech than respondents with the minimum score on this scale. Moreover, for each one-unit increase on the four-point scale of education, respondents were an average of 19% more likely to watch the speech. Stated differently, respondents with advanced degrees, the maximum score, were an average of 76% more likely to watch the president's speech than respondents who had not graduated from high school, the minimum score. In further evidence of the disengagement of young people from the political process, respondents between the ages of 18 and 21 were an average of 51% less likely to watch the State of the Union Address than respondents over 21 years old. Finally, the bivariate correlations between each of these

TABLE 7. Selection Model: The Decision to Watch the President's Speech

Independent Variable	Logit	Se	Exp(b)
Partisan intensity	.055	.017	1.1044*
Ideological intensity	.052	.013	1.1216**
Political involvement	.149	.010	1.1614**
Education	.174	.008	1.1902**
Age	-.702	.045	0.5071**
Pseudo R^2	.210		
N	77,963		

Note: Selection Model estimated using logistic regression analysis. The dependent variable is "Decision to Watch the President's Speech." *p<.01; **p<.001. Two-tailed.

explanatory variables and the public agenda proved statistically nonsignificant, satisfying the critical assumption that the explanatory variables in the Selection Model are unrelated to the public agenda (see Table E1 in Appendix E for the bivariate correlations). The Regression Model was then estimated with the interaction terms, along with their component variables, and the selection bias control factor, lambda, computed in the Selection Model.

Table 8 displays the results of the Regression Model. The statistically nonsignificant influence of lambda in the Regression Model confirms that the selection bias inherent in respondents' decisions to watch the State of the Union Address was effectively addressed. The odds ratios in Table 8 illustrate the effect of a one-unit increase in the value of the independent variable on the odds that a respondent identified an issue mentioned by the president as the most important problem facing America. The odds ratio for the *un*interacted moderator variable, exposure to the president's speech, demonstrates that respondents who watched the president's speech were approximately 4.6 times more likely to identify an issue mentioned in the speech as the most important problem than respondents who did not watch the speech.

We turn next to the individual (uninteracted) presidential rhetoric variables in the model. Because the unit of measurement for most of the presidential rhetoric variables is a single word, a more meaningful method for interpreting the substantive significance of these variables is to calculate the effect of a given rhetoric variable when the president relied on it to the maximum extent observed in the dataset. The odds ratios associated with the uninteracted presidential rhetoric variables represent the conditional effects of these variables on the odds that a respondent identified an issue mentioned by the president as most important, *when the value of the moderator is equal to zero* (Jaccard 2001). To interpret the substantive significance of an

TABLE 8. Regression Model: Exposure to the President's Speech and the Relationship Between Presidential Rhetoric and the Public Agenda

Independent Variable	Logit	Rse	Exp(b)
Presidential Rhetoric			
Issue attention	.001	.000	1.0001
Issue justification	.003	.001	1.0021**
Credit claiming without evidence	-.003	.002	0.9986
Credit claiming w/ evidence	-.026	.004	0.9941**
Public appeals	.016	.004	1.0114**
Congressional appeals	.006	.002	1.0014
Fear appeals	.013	.004	1.0134*
American values	.041	.031	1.0001
Compare and contrast	.000	.002	0.9998
Foreign policy	.245	.228	1.0001
Agenda size	.017	.011	1.0068
Issue order	.014	.010	1.0043
Exposure to President's Speech	1.516	.354	4.5561**
Interactions			
Speech x Issue attention	.002	.001	1.0002*
Speech x Issue justification	.002	.000	1.0021**
Speech x Credit claiming without evidence	-.010	.004	0.9987*
Speech x Credit claiming with evidence	-.004	.001	0.9956*
Speech x Public appeals	-.004	.003	1.0125**
Speech x Congressional appeals	.014	.004	1.0045**
Speech x Fear appeals	.012	.003	1.0123**
Speech x American values	.069	.034	1.0010
Speech x Compare and contrast	.004	.002	1.0004
Speech x Foreign policy	.965	.305	2.6241**
Speech x Agenda size	-.012	.012	0.9978
Speech x Issue order	-.059	.011	0.9910**
Individual Presidents			
Bush I	.017	.432	1.0000
Clinton	.451	.401	1.0012
Bush II	.597	.397	1.0316
Contextual Factors			
Prior public agenda	.100	.003	1.1179**
Prior media coverage	.061	.051	0.9949
Economic conditions	.473	.105	1.6047**
Important Events	.739	.248	1.5624*
Lambda	-.322	.217	0.9977
Pseudo R^2	.253		
N	75,455		

Note: Regression Model estimated using logistic regression analysis with White's robust standard errors. The dependent variable is the Public Agenda. The explanatory variables in the Selection Model were included as controls in the Regression Model. These results are not shown but are available upon request from the author. *p <.01; **p <.001. Two-tailed.

uninteracted rhetoric variable, the odds ratio for that appeal was multiplied by the maximum number of words used by the president to issue that appeal.

Considered first is the influence of public appeals. The odds ratio for the uninteracted public appeals variable (1.0114) indicates that, *for each additional word* used by the president to appeal for public support on an issue, respondents *who did not watch the speech* were an average of 1.1% more likely to identify that issue as most important. Multiplying the odds ratio by the full range of the public appeals variable (67 words) reveals that respondents who did not watch the speech were an average of 74% more likely to identify an issue as the most important problem when the president appealed for public support on that issue to the maximum extent observed in the dataset. Presidents also used fear appeals to heighten the salience of issues mentioned in their speeches. When presidents directed the public's attention to possible consequences that might occur if their position on an issue was not adopted (38 words), respondents were an average of 49% more likely to consider that issue to be the most important facing America. Finally, when presidents relied on substantive justifications of the importance of an issue (372 words), respondents who did not watch the president's speech were an average of 74% more likely to identify that issue as most important.

The interaction terms in the Regression Model suggest that several forms of presidential rhetoric figured more prominently in the evaluations of issue salience expressed by those who watched the speech than by those who did not watch the speech. In fact, when presidential rhetoric was influential, it was usually influential *only* among respondents who watched the president's speech. Issue attention, credit claiming without evidence, congressional appeals, foreign policy, and issue order were all emphasized in the evaluations of issue salience expressed *only* by those who watched the speech. The interaction terms in this, and all subsequent, models

are interpreted as the average change in the influence of a rhetoric variable on the public agenda, given a one-unit increase in the moderator variable- which, in this case, is exposure to the president's speech (Jaccard 2001). Discussed below are congressional appeals, issue attention, and credit claiming with evidence. The moderating effect of exposure to the president's speech on the influence of each of these forms of presidential rhetoric is also demonstrated graphically in Figures 2 through 4.

Take congressional appeals, for example. The *un*interacted effect of this rhetorical variable suggests that, when presidents appealed to Congress for legislative action on an issue (105 words), respondents *who did not watch the speech* were an average of 11% more likely to select that issue as the nation's most important problem. The interaction term for this rhetorical appeal reveals that the influence of congressional appeals was an average of 53% *greater* among respondents who watched the speech than among respondents who did not watch the speech. Thus, when presidents appealed to Congress on an issue to the maximum extent observed, respondents who watched the speech were an average of 64% more likely to identify that issue as the most important.[38]

Exposure to the president's speech also proved to be an important moderator of the influence of issue attention on the public agenda. The uninteracted effect of issue attention reveals that, when presidents discussed an issue to the fullest extent (1703 words), respondents

[38] The uninteracted effect of congressional appeals represents the influence of this variable among those who did not watch the president's speech. The interaction term for congressional appeals indicates how much *greater* the influence of congressional appeals was among respondents who did watch the president's speech, than among respondents who did not. Thus, the total influence of congressional appeals on the public agenda among respondents who watched the speech was calculated by combining the uninteracted effect for congressional appeals (11%) with the effect of the interaction between congressional appeals and exposure to the president's speech (53%), yielding a product of 64%.

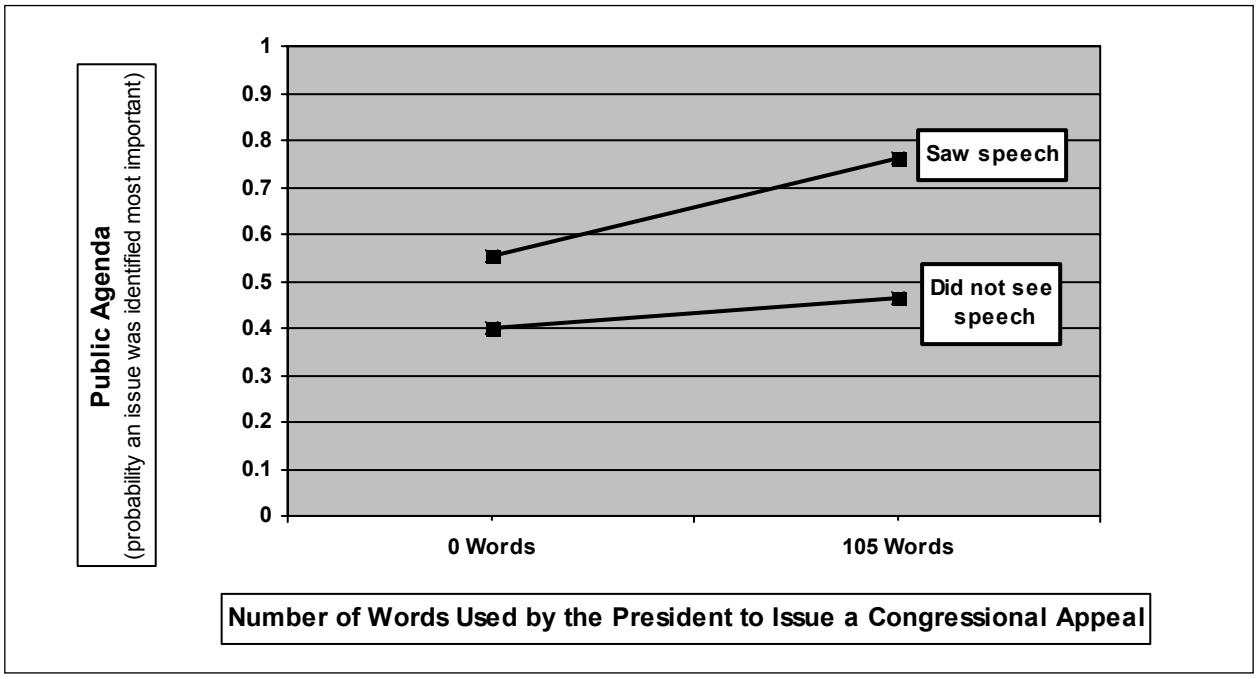

FIGURE 2. The Moderating Effect of Exposure to the President's Speech on the Relationship Between Congressional Appeals and the Public Agenda

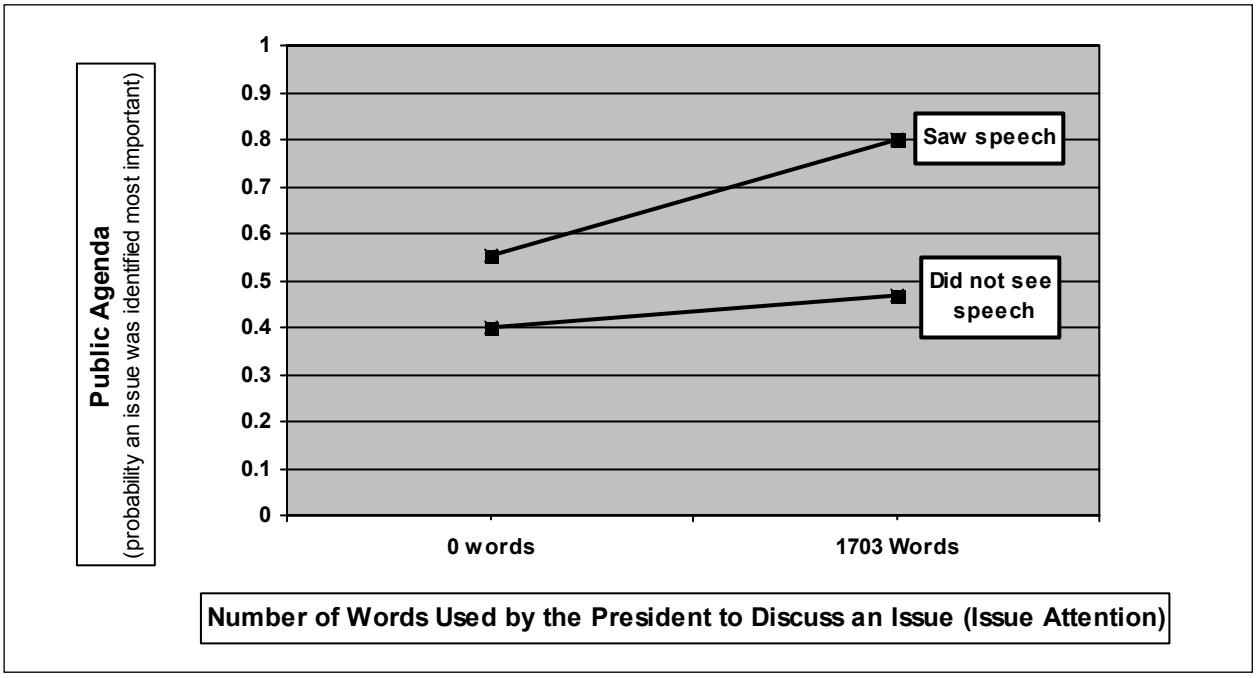

FIGURE 3. The Moderating Effect of Exposure to the President's Speech on the Relationship Between Issue Attention and the Public Agenda

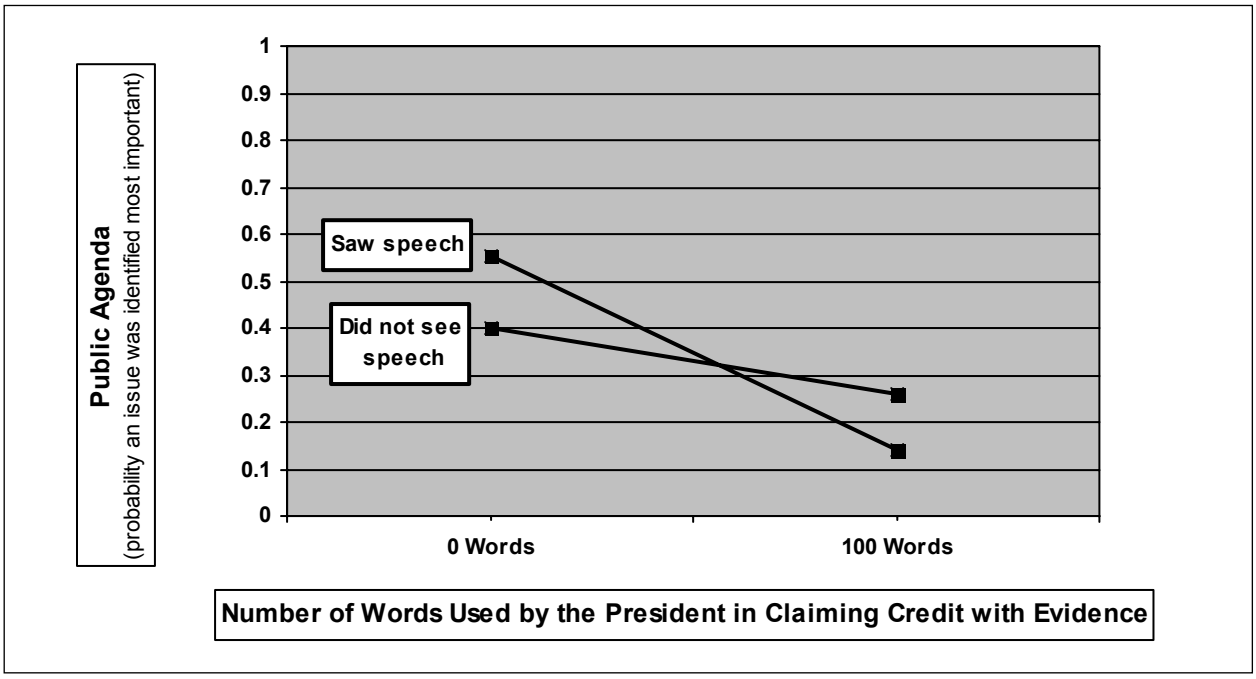

FIGURE 4. The Moderating Effect of Exposure to the President's Speech on the Relationship Between Credit Claiming with Evidence and the Public Agenda

who did not watch the president's speech were an average of 17% more likely to identify that issue as the most important problem facing America. The interaction term indicates that the influence of issue attention on the public agenda was an average of 34% *greater* among respondents who watched the president's speech than among respondents who did not. Thus, when presidents maximized their discussion of an issue, respondents who watched the president's speech were an average of 51% more likely to identify that issue as the most important problem facing America.

Also, when presidents cited quantitative evidence of success achieved in dealing with an issue (100 words), the uninteracted effect of credit claiming with evidence suggests that respondents who did not watch the speech were an average 60% *less* likely to identify that issue as the most important. When interacted with exposure to the president's speech, the influence of credit claiming with evidence was an average of 40% *greater* among respondents who watched

the president's speech than among respondents who did not watch the speech. Thus, when presidents invoked credit claiming with evidence to the fullest extent, respondents who watched the speech were an average of 100% *less* likely to identify that issue as the most important problem.

These findings stand in contrast to considerable research that finds the greatest impact of another form of presidential communication, presidential debates, is among those who did *not* watch the debates (Jamieson and Waldman 2001). Although speculative, the discrepancy can probably be explained by the role played by media coverage. First, many of the people who do not watch presidential debates may be exposed to some for of media coverage of the debates, perhaps by accident, in which the main points and arguments of the candidates are presented in summarized fashion. This media coverage often features the commentary of political pundits who offer their opinion as to how well the candidates performed and who, in their estimation, won or lost the debate. On the other hand, those who do not watch State of the Union Addresses are not as likely to be exposed to extensive media coverage of those addresses. For one, the level of media coverage attracted by presidential debates, held during the general election phase of a presidential campaign, is typically far greater than that received by a State of the Union Address. For another, the respondents in this study who did not watch the president's speech did not have an opportunity to seek out media coverage of the speech: all four surveys in this study were conducted on the day of the State of the Union Address, or the following day.

Finally, the results show that the public agenda in the Regression Model was responsive to a number of other factors in addition to presidential rhetoric. Worsening economic conditions encouraged respondents to identify economic issues mentioned by the president as most important, important events relevant to issues mentioned in the speech led respondents to choose

those issues as the most important, and the public agenda measured prior to the speech proved to be a strong predictor of the public agenda measured after the speech.

2. Presidential Support

As the evidence marshaled above indicates, presidential rhetoric is substantially more influential among respondents who watched the president's speech than among respondents who did not watch the speech. It remains to consider who among the respondents that *did* watch the president's speech were the most receptive to the president's rhetoric. Consequently, the moderating influences of presidential support, political predispositions, and demographic characteristics were estimated using a sample composed of only those respondents who watched the president's speech.

The results from the Presidential Support models appear in Tables 9 and 10. First, concerning the presidential vote choice model shown in Table 9, the coefficient for the uninteracted vote choice variable indicates that respondents who voted for the president were more than twice as likely to identify an issue mentioned by the president as most important than respondents who did not vote for the president. Moreover, the interaction terms show that respondents who voted for the president were, in numerous cases, more receptive to presidential rhetoric in their assessments of issue salience than respondents who did not vote for the president. More specifically, respondents who voted for the president were more receptive than respondents who did not to the president's use of issue attention, issue justifications, credit claiming with evidence, congressional appeals, fear appeals, American values, and agenda size. Addressed further is the moderating influence of vote choice on issue attention, issue justifications, and credit claiming with evidence. The moderating effect of presidential vote

choice on the influence of these presidential rhetoric variables is represented graphically in Figures 5 through 7.

By devoting more time to their discussion of an issue, presidents were able to increase public concern about that issue. When presidents maximized their discussion of an issue (1703 words), respondents who did not watch the speech were an average of 17% more likely to believe that issue represented the most important problem facing the country. But the effect of issue attention on the public agenda was an average of 34% *greater* among respondents who voted for the president than among respondents who did not. As a result, respondents were an average of 51% more likely to identify an issue as the most important problem when presidents used 1703 words to discuss that issue.

When presidents relied on substantive justifications of the importance of certain issues (372 words), respondents who did not watch the speech were an average of 15% more likely to identify those issues as most important. Also, the interaction term demonstrates that the effect of issue attention on the public agenda was an average of 26% *greater* among those who voted for the president than among those who did not. Thus, respondents who voted for the president were an average of 41% more likely to identify an issue as the most important problem when the president attempted to justify the importance of that issue to the maximum extent observed.

Finally, by directing the public's attention to evidence of progress made in dealing with certain issues, presidents were able to substantially reduce public concern about those issues. When presidents relied on credit claiming with evidence in their discussion of an issue (100 words), respondents who did not vote for the president were an average of 30% *less* likely to identify that issue as most important. The influence of credit claiming with evidence was an

TABLE 9. Presidential Vote Choice and the Relationship Between Presidential Rhetoric and the Public Agenda

Independent Variable	Logit	Se	Exp(b)
Presidential Rhetoric			
Issue attention	.002	.000	1.0001**
Issue justification	.008	.001	1.0004**
Credit claiming without evidence	.003	.002	0.9990
Credit claiming w/ evidence	-.034	.005	0.9967**
Public appeals	.039	.003	1.0033**
Congressional appeals	.006	.002	1.0001
Fear appeals	-.001	.007	1.0000
American values	.063	.042	0.9997
Compare and contrast	.006	.001	1.0013**
Foreign policy	.629	.267	1.0001
Agenda size	-.002	.010	0.9998
Issue order	-.027	.010	0.9832*
Presidential Vote Choice	.740	.209	2.0959**
Interactions			
Vote choice x Issue attention	.001	.000	1.0002**
Vote choice x Issue justification	.006	.002	1.0007**
Vote choice x Credit claiming without evidence	.000	.003	1.0004
Vote choice x Credit claiming w/ evidence	-.003	.001	0.9966*
Vote choice x Public appeals	.011	.009	1.0010
Vote choice x Congressional appeals	.016	.002	1.0021**
Vote choice x Fear appeals	.017	.004	1.0167**
Vote choice x American values	.148	.042	1.0159**
Vote choice x Compare and contrast	.002	.001	1.0002
Vote choice x Foreign policy	.738	.446	2.0001
Vote choice x Agenda size	-.030	.012	0.9704*
Vote choice x Issue order	.002	.011	0.9997
Individual Presidents			
Bush I	.022	.030	1.0022
Clinton	.258	.127	1.0294
Bush II	.198	.106	1.0219
Contextual Factors			
Prior public agenda	.105	.004	1.1101**
Prior media coverage	.141	.062	1.1421
Economic conditions	.615	.143	1.8544**
Important Events	.906	.385	1.6636**
Pseudo R^2	.254		
N	38,681		

Note: Presidential Vote Choice model estimated using logistic regression analysis. The dependent variable is the Public Agenda. *p <.01; **p <.001. Two-tailed.

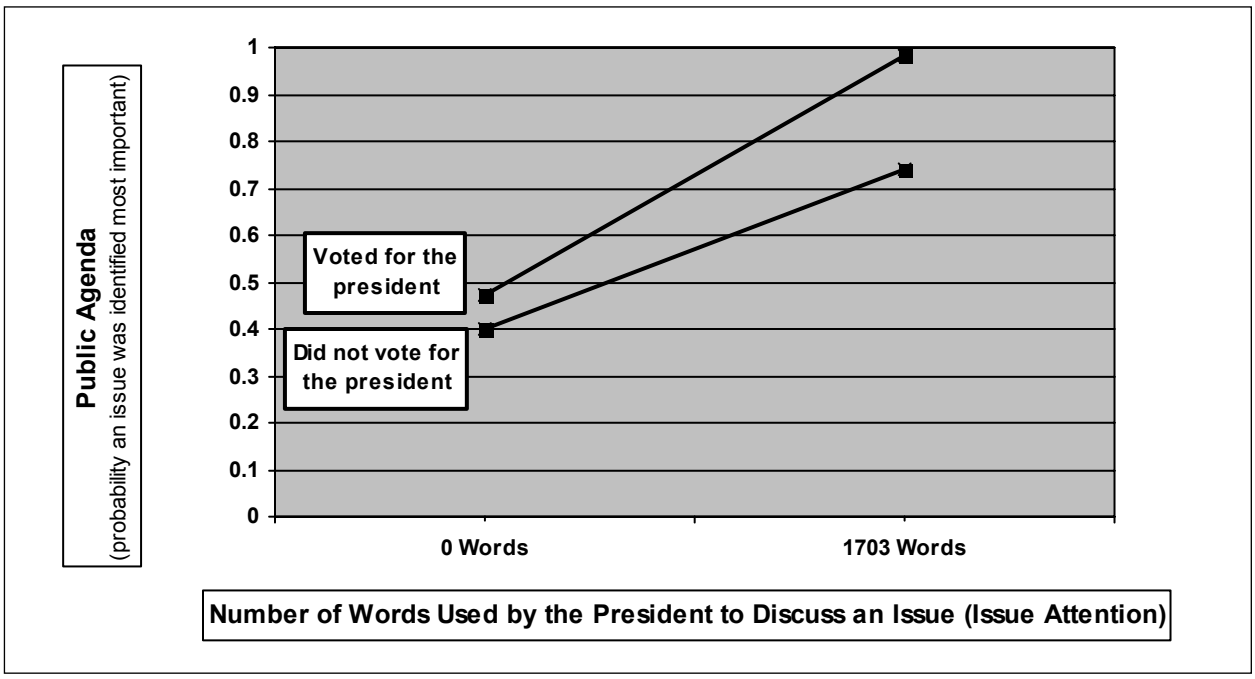

FIGURE 5. The Moderating Effect of Presidential Vote Choice on the Relationship Between Issue Attention and the Public Agenda

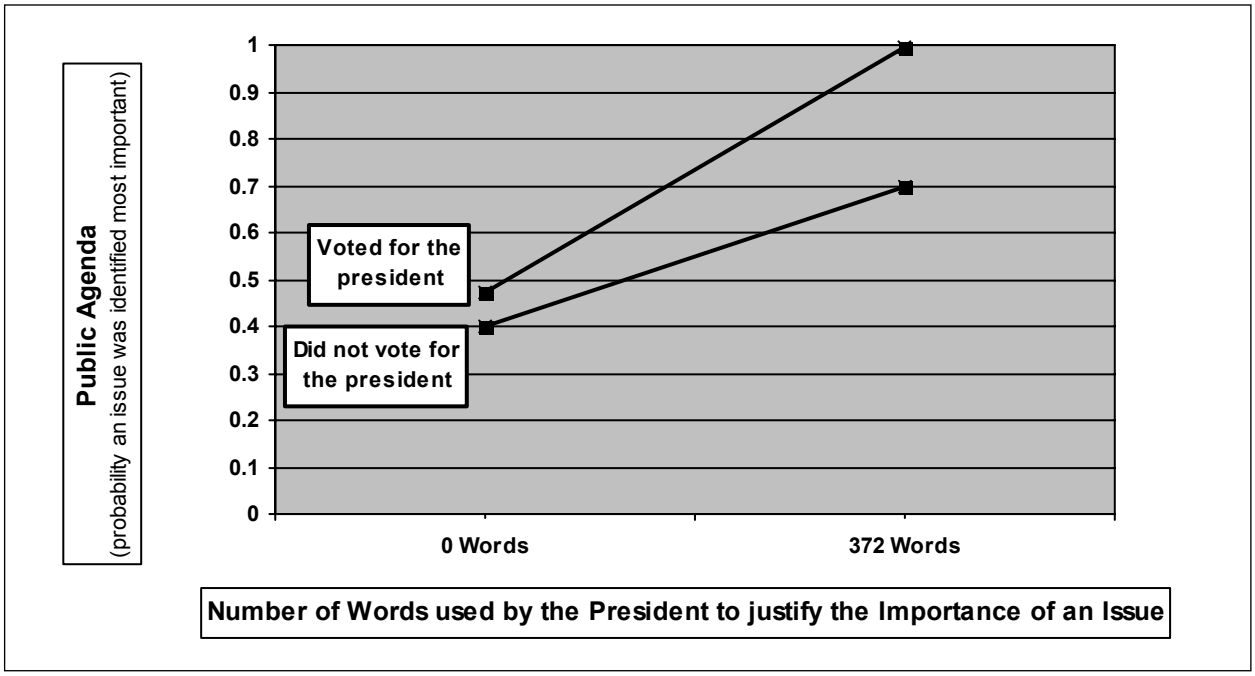

FIGURE 6. The Moderating Effect of Presidential Vote Choice on the Relationship Between Issue Justification and the Public Agenda

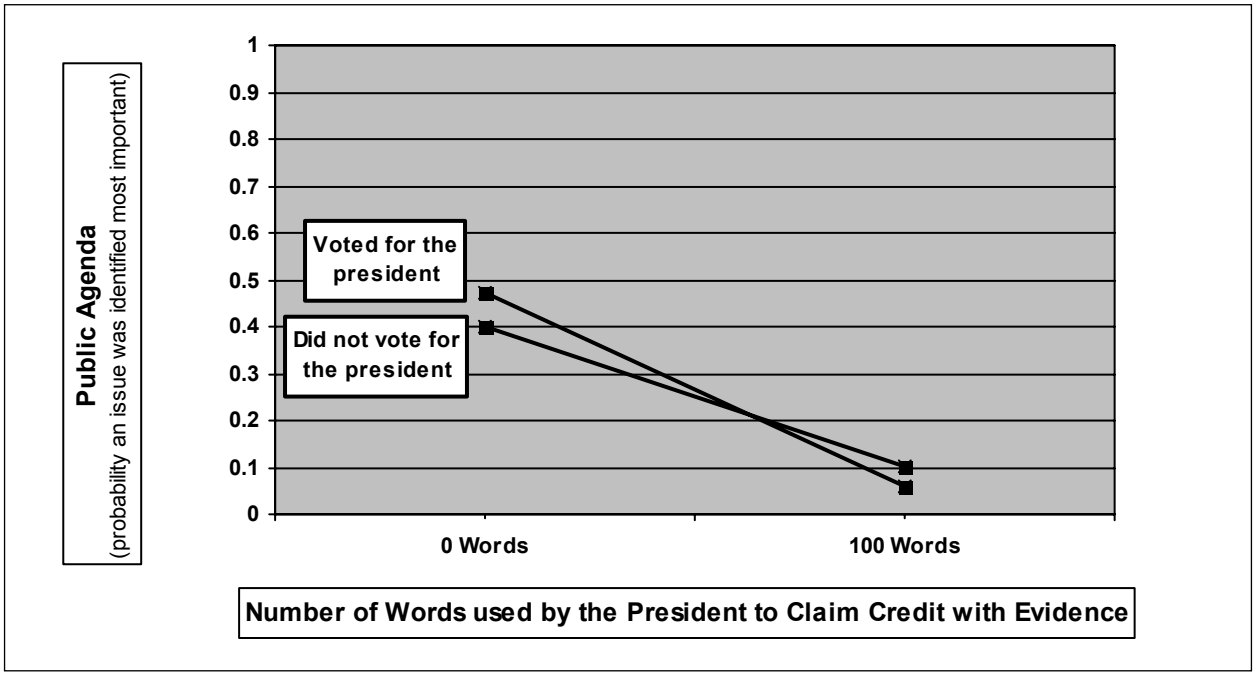

FIGURE 7. The Moderating Effect of Presidential Vote Choice on the Relationship Between Credit Claiming with Evidence and the Public Agenda

average of 40% *greater* among respondents who voted for the president than among respondents who did not. Thus, when presidents relied on credit claiming to the maximum extent observed, respondents who voted for the president were an average of 70% *less* likely to consider that issue to be the most important problem facing the nation.

Intriguingly, the statistical significance of many of the individual (uninteracted) rhetoric variables suggests that, while presidential rhetoric is influential among respondents who watched the speech *and* voted for the president, presidential rhetoric is also influential among respondents who watched the speech *but did not* vote for the president. A few examples serve to illustrate the point. First, respondents who did not vote for the president were an average of 20% more likely to choose an issue mentioned by the president as most important when the president appealed for public support on that issue (67 words). Second, when presidents compared their policies for addressing an issue with the policies proposed by others (264 words), respondents who did not

vote for the president were an average of 34% more likely to identify that issue as the nation's most important. Finally, attesting to the importance of issue order, presidents increased the salience of issues by discussing those issues at the beginning of their speeches. Assuming the president discussed a total of 24 issues in their speech, the maximum observed number of issues, respondents were an average of 64% less likely to identify an issue mentioned by the president as most important if the president relegated their discussion of that issue to the end of the speech, than if the president discussed that issue at the beginning of the speech.

Like those who voted for the president, respondents who approved of the president's performance were considerably more likely to select issues mentioned by the president as the most important problems facing the nation. According to the results in Table 10, the uninteracted presidential approval variable demonstrates that respondents who approved of the president's performance were more than twice as likely to identify an issue mentioned by the president as the most important problem than respondents who disapproved of the president's performance. Furthermore, presidential approval acts as a robust moderator of the relationship between several forms of presidential rhetoric and the public agenda. Issue attention, issue justifications, credit claiming with evidence, congressional appeals, fear appeals, compare and contrast, agenda size, and issue order were all emphasized more heavily in the evaluations of issue salience expressed by respondents who approved of the president than by respondents who disapproved of the president. The following considers in more detail the influence of approval on issue justifications, agenda size, and compare and contrast. Figures 8 through 10 illustrate these effects in graphical form.

When presidents justified the importance of issues in their speeches (372 words), respondents who disapproved of the president were an average of 37% more likely to identify

those issues as the nation's most important problems. The interaction term indicates that the influence of issue justifications was an average of 52% *greater* among respondents who approved of the president than among respondents who disapproved of the president. Therefore, respondents who approved of the president's performance were an average of 89% more likely to identify an issue as most important when the president attempted to justify the importance of that issue to the maximum extent observed in the dataset.

Also, in evidence of the importance of agenda size, when presidents discussed the maximum observed number of issues in their speeches (24), respondents who disapproved of the president's performance were an average of 38% *less* likely to identify those issues as most important. In addition, the influence of agenda size was an average of 29% *greater* among respondents who approved of the president than among respondents who disapproved. Accordingly, when presidents discussed the maximum number of issues in their speeches, respondents who approved of the president's performance were an average of 67% *less* likely to identify those issues as the most important problems facing the country.

By comparing and contrasting their policies with others presidents were able increase the salience of those issues. More precisely, when presidents relied on comparison and contrasts in discussing an issue (264 words), respondents who disapproved of the president were an average of 29% more likely to recognize that issue as the most important problem. Moreover, the influence of comparison and contrasts was an average of 42% *greater* among respondents who approved of the president than among respondents who disapproved of the president. Thus, respondents who approved of the president were an average of 71% more likely to identify an issue as most important when the president compared and contrasted their policy for addressing that issue with the policies proposed by others to the fullest extent observed.

TABLE 10. Presidential Approval and the Relationship Between Presidential Rhetoric and the Public Agenda

Independent Variable	Logit	Se	Exp(b)
Presidential Rhetoric			
Issue attention	.003	.000	1.0002**
Issue justification	.011	.001	1.0011**
Credit claiming without evidence	-.003	.002	0.9967
Credit claiming w/ evidence	-.019	.005	0.9989**
Public appeals	.004	.004	1.0000
Congressional appeals	.006	.003	1.0032**
Fear appeals	-.013	.008	0.9968
American values	.075	.062	1.0001
Compare and contrast	.005	.001	1.0011**
Foreign policy	.627	.455	1.5340
Agenda size	-.049	.010	0.9840*
Issue order	-.049	.031	0.9917
Presidential Approval	.825	235	2.2819**
Interactions			
Approval x Issue attention	.002	.000	1.0002**
Approval x Issue justification	.009	.001	1.0014**
Approval x Credit claiming without evidence	.002	.002	1.0000
Approval x Credit claiming w/ evidence	-.021	.007	0.9976*
Approval x Public appeals	.021	.009	1.0021
Approval x Congressional appeals	.012	.003	1.0062**
Approval x Fear appeals	.027	.004	1.0268**
Approval x American values	.095	.071	1.0002
Approval x Compare and contrast	.005	.001	1.0016**
Approval x Foreign policy	.564	.373	1.7574
Approval x Agenda size	-.066	.012	0.9366**
Approval x Issue order	-.038	.010	0.9629
Individual Presidents			
Bush I	.022	.049	1.0221
Clinton	.320	.125	1.0596
Bush II	.964	.383	1.0613*
Contextual Factors			
Prior public agenda	.104	.003	1.1641**
Prior media coverage	.161	.055	1.1154*
Economic conditions	.520	.123	1.6228**
Important Events	.722	.265	1.5111*
Pseudo R^2	.243		
N	50,953		

Note: Presidential Approval model estimated using logistic regression analysis. The dependent variable is the Public Agenda. *p <.01; **p <.001. Two-tailed.

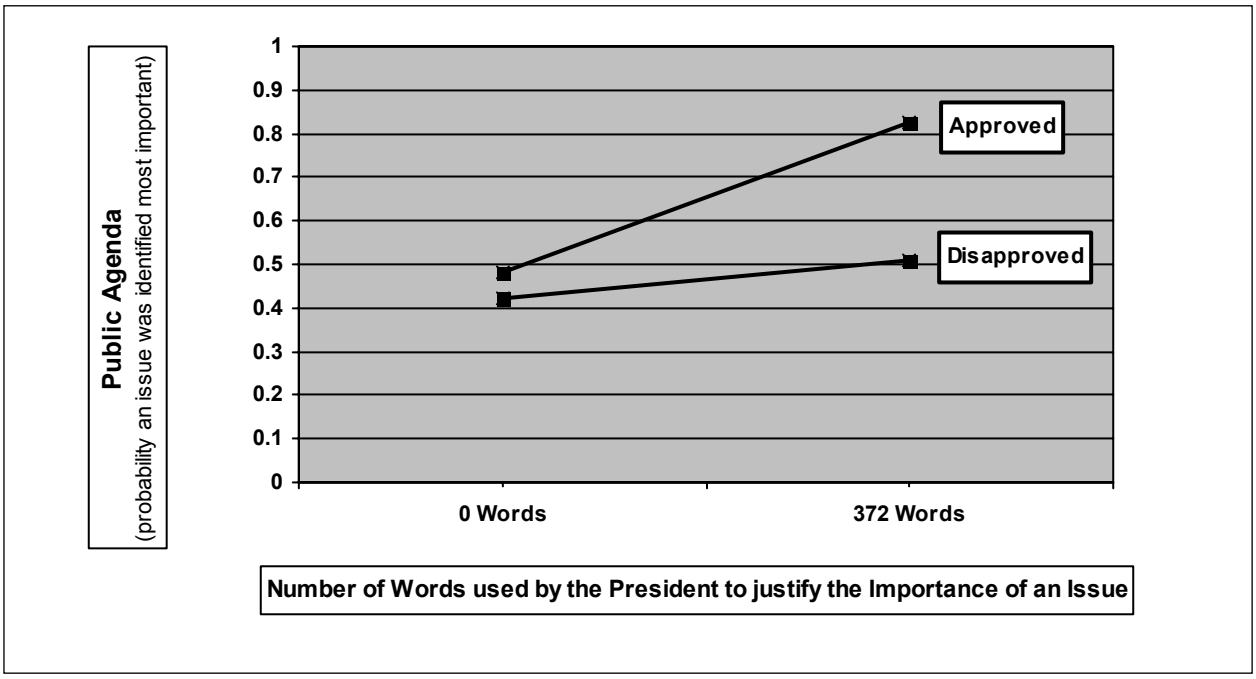

FIGURE 8. The Moderating Effect of Presidential Approval on the Relationship Between Issue Justification and the Public Agenda

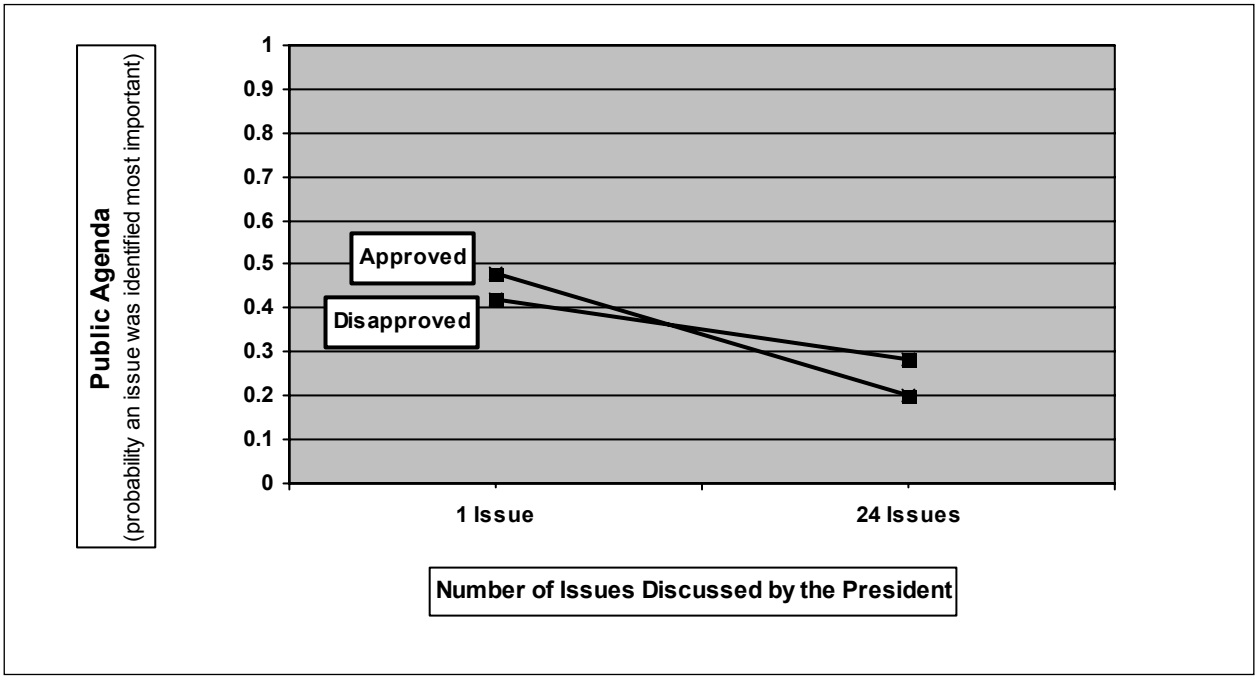

FIGURE 9. The Moderating Effect of Presidential Approval on the Relationship Between Agenda Size and the Public Agenda

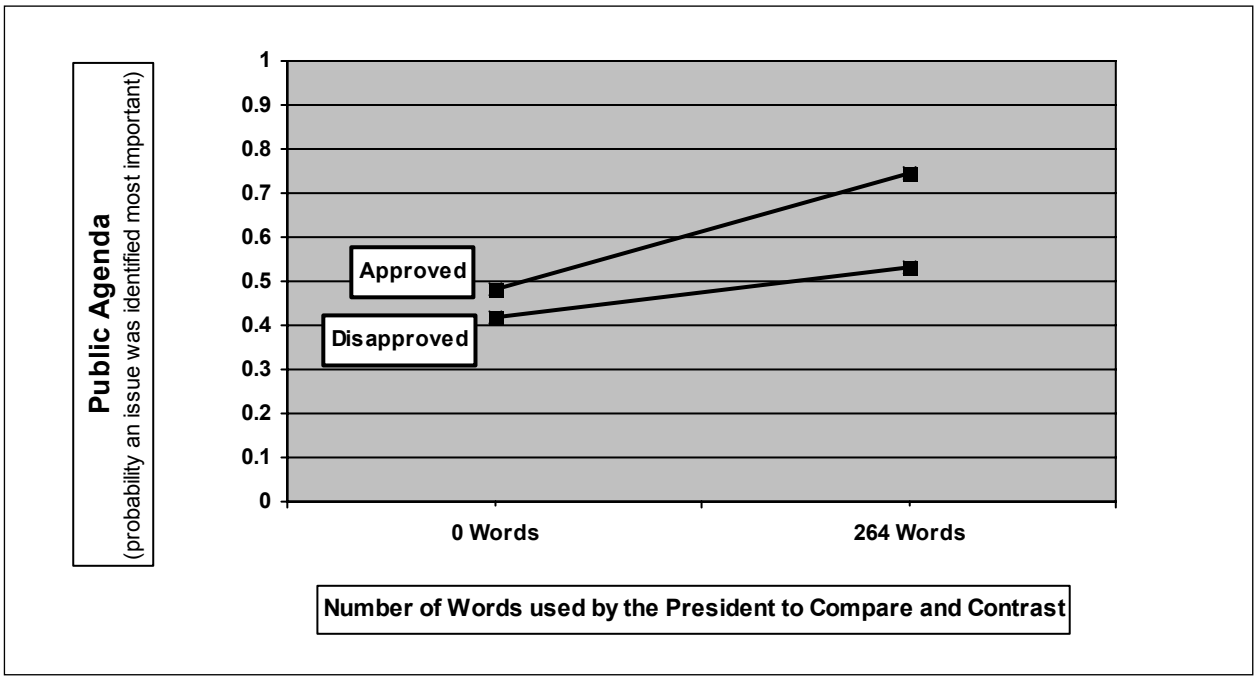

FIGURE 10. The Moderating Effect of Presidential Approval on the Relationship Between Compare and Contrast and the Public Agenda

The statistical significance of several individual (uninteracted) rhetoric variables further demonstrates that even respondents who watched the president's speech, but *disapproved* of the president's performance, were influenced by presidential rhetoric. First, when presidents expanded their discussion of an issue to the maximum extent observed (1703 words), respondents who disapproved were an average of 34% more likely to identify that issue as most important. Second, when presidents appealed to Congress for action on an issue, respondents who disapproved were an average of 34% more likely to believe that issue represented the nation's most important problem. Finally, when presidents cited evidence in claiming credit for progress made in dealing with an issue (100 words), respondents who disapproved of the president were an average of 21% *less* likely to cite that issue as the most important problem. Finally, the results of both Presidential Support models reveal important events, economic conditions, and the prior public agenda to be important determinants of the public agenda.

3. Political Predispositions

The results of the Political Predispositions models are shown in Tables 11 and 12. Respondents who shared the same partisan predisposition as the president were expected to be more influenced by that president's rhetoric than respondents with the opposite partisan predisposition. The results summarized in Table 11 provide strong evidence in support of this expectation. Democrats were more likely than Republicans to identify the issues mentioned by Clinton in his speech as important, and Republicans were more likely than Democrats to identify the issues mentioned by Reagan, George H.W. Bush, and George W. Bush in their speeches as most important. The coefficient of the uninteracted partisan predisposition variable shows that respondents with the same party identification as the president were about 1.51 times, or 51%, more likely to identify an issue mentioned by that president as most important than respondents with the opposite party identification.

The interaction terms further show that presidential rhetoric weighed more heavily in the evaluations of issue salience made by respondents who belonged to the same party as the president. More specifically, the following discussion considers the moderating effect of partisan identification on the influence of issue attention, fear appeals, and American values, each of which is shown graphically in Figures 11 through 13. When presidents used 1703 words to discuss an issue, respondents of the opposite party were an average of 17% more likely to select that issue as most important. But the influence of issue attention was an average of 34% *greater* among respondents from the same party than among respondents from the opposite party. Consequently, when presidents employed the full range of issue attention in their discussion of an issue, respondents of the same party as the president were an average of 51% more likely to identify that issue as the nation's most important problem.

By referring to the possible consequences likely to occur is their position on an issue was not adopted (38 words), respondents of the opposing party were an average of just 4% more likely to identify that issue as most important. However, the influence of fear appeals on the odds that respondents identified an issue as most important was an average of 53% *greater* among respondents of the same party as the president than among respondents of the opposing party. As a result, when presidents used fear appeals to the maximum extent observed, respondents of the same party as the president were an average of 57% more likely to identify that issue as most important.

In associating particular issues with cherished American values, presidents encouraged respondents to view those issues as more important. Respondents from the opposite party of the president were an average of 45% more likely to identify an issue as most important when presidents attempted to associate that issue with American values (38 words). Additionally, the influence of American values was an average of 65% *greater* among respondents from the same party than among respondents from the opposite party. Thus, when presidents associated issues in their speeches with American values to the maximum extent, respondents from the president's party were an average of 110% more likely to consider that issue to be the most important problem.

While presidential rhetoric was a more important determinant of the public agenda among respondents who shared the same party identification as the president, the results also demonstrate that presidents also used their rhetoric to influence the public agenda among respondents who identified with the opposing party. In particular, issue attention, issue justifications, credit claiming, American values, compare and contrast, and issue order were all

TABLE 11. Partisan Predispositions and the Relationship Between Presidential Rhetoric and the Public Agenda

Independent Variable	Logit	Se	Exp(b)
Presidential Rhetoric			
Issue attention	.003	.000	1.0001**
Issue justification	.011	.002	1.0009**
Credit claiming without evidence	-.012	.003	0.9987**
Credit claiming w/ evidence	-.008	.008	0.9997
Public appeals	.046	.005	1.0046
Congressional appeals	.006	.003	1.0012
Fear appeals	.004	.009	1.0010
American values	.111	.039	1.0120*
Compare and contrast	.007	.002	1.0016**
Foreign policy	.534	.294	1.1860
Agenda size	-.004	.012	0.9999
Issue order	-.064	.011	0.9380**
Partisan Predispositions	.414	.103	1.5125**
Interactions			
Partisan pred. x Issue attention	.003	.001	1.0002**
Partisan pred. x Issue justification	.001	.000	1.0110**
Partisan pred. x Credit claiming	-.012	.004	0.9983*
Partisan pred. x Credit claiming w/ evidence	-.006	.001	0.9948**
Partisan pred. x Public appeals	.002	.004	1.0002
Partisan pred. x Congressional appeals	.005	.001	1.0071**
Partisan pred. x Fear appeals	.008	.002	1.0078**
Partisan pred. x American values	.063	.014	1.0166**
Partisan pred. x Compare and contrast	.001	.001	1.0001
Partisan pred. x Foreign policy	.180	.136	1.1973
Partisan pred. x Agenda size	-.004	.005	0.9996
Partisan pred. x Issue order	-.018	.005	0.9829**
Individual Presidents			
Bush I	.242	.115	1.0274
Clinton	.435	.169	1.0245
Bush II	.641	.312	1.0356
Contextual Factors			
Prior public agenda	.103	.003	1.1231**
Prior media coverage	.175	.052	1.1762*
Economic conditions	.584	.118	1.7904**
Important Events	.761	.264	1.5317*
Pseudo R^2	.241		
N	54,080		

Note: Partisan Predispositions model estimated using logistic regression analysis. The dependent variable is the Public Agenda. *p <.01; **p <.001. Two-tailed.

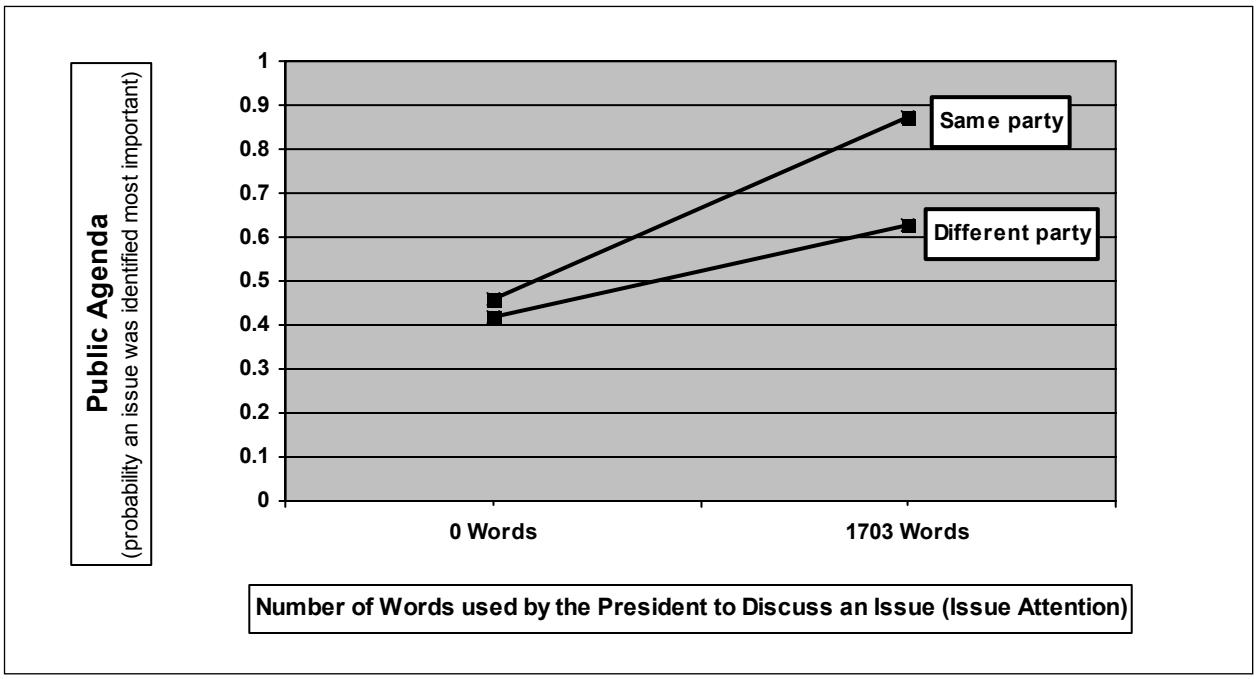

FIGURE 11. The Moderating Effect of Party Identification on the Relationship Between Issue Attention and the Public Agenda

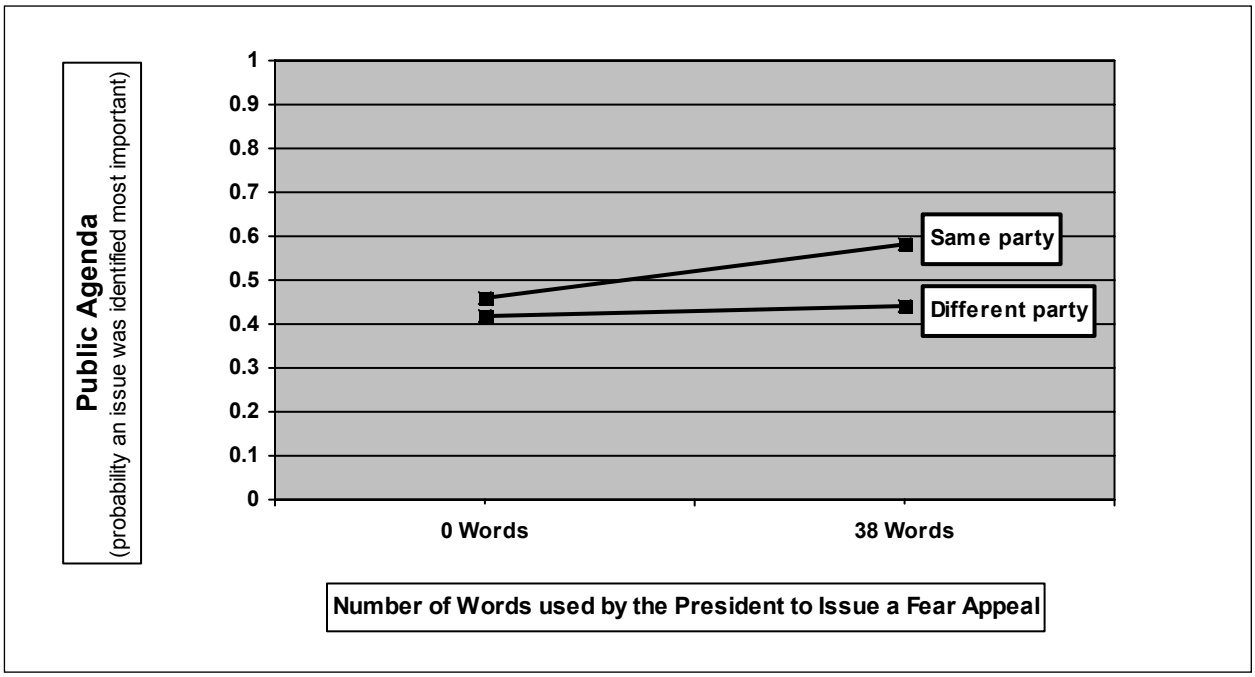

FIGURE 12. The Moderating Effect of Party Identification on the Relationship Between Fear Appeals and the Public Agenda

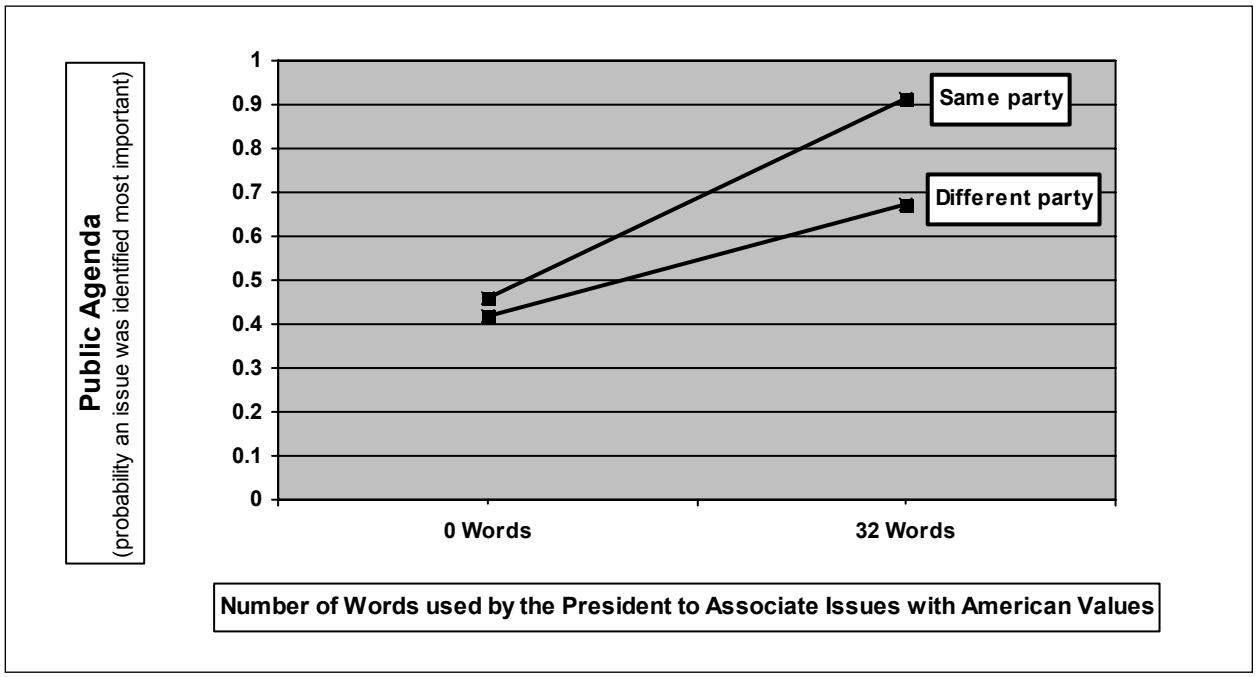

FIGURE 13. The Moderating Effect of Party Identification on the Relationship Between American Values and the Public Agenda

important factors in the evaluations of issue salience expressed by respondents from the opposite party of the president.

For example, when presidents compared their policies for dealing with an issue with the policies advocated by others (264 words), respondents from the opposite party were an average of 42% more likely to believe that issue represented the nation's most important problem. Also, respondents were an average of 33% more likely to identify an issue as most important when presidents resorted to substantive justifications of the importance of that issue (372 words). Finally, when the president claimed credit for progress made in dealing with an issue (205 words), respondents of the opposing party were an average of 27% *less* likely to believe that issue was most important.

The results in Table 12 demonstrate the moderating influence of ideological orientation on the relationship between presidential rhetoric and the public agenda. Liberals were more likely to identify the issues mentioned by Clinton as most important, whereas conservatives were more likely to identify the issues mentioned by Reagan, George H.W. Bush, and George W. Bush as most important. More precisely, the coefficient of the uninteracted variable, ideological orientations, indicates that respondents with the same ideological orientation as the president were about 1.52 times, or 52%, more likely to identify an issue mentioned by that president as most important than respondents with the opposite ideological orientation.

The interaction terms reveal that presidential rhetoric was a more important determinant of the evaluations of issue salience expressed by respondents with the same ideological orientation as the president. Interpreted below is the moderating effect of ideological orientations on the influence of American values, issue justifications, and credit claiming with evidence. The moderating effect of ideology on the influence of each of these presidential rhetoric variables is portrayed graphically in Figures 14 through 16. When presidents associated issues with American values (32 words), respondents who shared the same ideological orientation as the president were an average of just 4% more likely to identify those issues as most important. However, the influence of American values was an average of 53% *greater* among respondents who shared the same ideological orientation as the president than among respondents who did not. Therefore, by associating an issue with American values to the fullest extent, respondents with the same ideological orientation as the president were an average of 57% more likely to identify that issue as most important.

TABLE 12. Ideological Orientation and the Relationship Between Presidential Rhetoric and the Public Agenda

Independent Variable	Logit	Se	Exp(b)
Presidential Rhetoric			
Issue attention	.000	.000	1.0000
Issue justification	.003	.001	1.0002
Credit claiming without evidence	-.012	.003	0.9979**
Credit claiming w/ evidence	-.056	.007	0.9971**
Public appeals	.049	.005	1.0050**
Congressional appeals	.012	.004	1.0020*
Fear appeals	.007	.011	1.0001
American values	.012	.078	1.0011
Compare and contrast	.008	.002	1.014**
Foreign policy	.361	.377	1.1693
Agenda size	-.044	.014	1.0065*
Issue order	-.041	.012	1.0068*
Ideological Orientation	.457	.116	1.5244**
Interactions			
Ideological orientat. X Issue attention	.000	.000	1.0000
Ideological orientat. X Issue justification	.001	.000	1.0006*
Ideological orientat. X Credit claiming w/out evidence	-.007	.001	0.9988**
Ideological orientat. X Credit claiming w/ evidence	-.015	.003	0.9945**
Ideological orientat. X Public appeals	.006	.034	1.0000
Ideological orientat. X Congressional appeals	.008	.002	1.0037**
Ideological orientat. X Fear appeals	.004	.005	1.0004
Ideological orientat. X American values	.012	.003	1.014**
Ideological orientat. X Compare and contrast	.002	.001	1.0001
Ideological orientat. X Foreign policy	.363	.236	1.4378
Ideological orientat. X Agenda size	-.019	.006	0.9814*
Ideological orientat. X Issue order	-.035	.006	0.9655**
Individual Presidents			
Bush I	-.017	.052	0.9983
Clinton	.573	.299	1.0267
Bush II	.519	.887	1.0003
Contextual Factors			
Prior public agenda	.102	.003	1.1164**
Prior media coverage	.133	.053	1.1219
Economic conditions	.593	.116	1.8100**
Important Events	.685	.257	1.5019*
Pseudo R^2	.256		
N	54,216		

Note: Partisan Predispositions model estimated using logistic regression analysis. The dependent variable is the Public Agenda. *p <.01; **p <.001. Two-tailed.

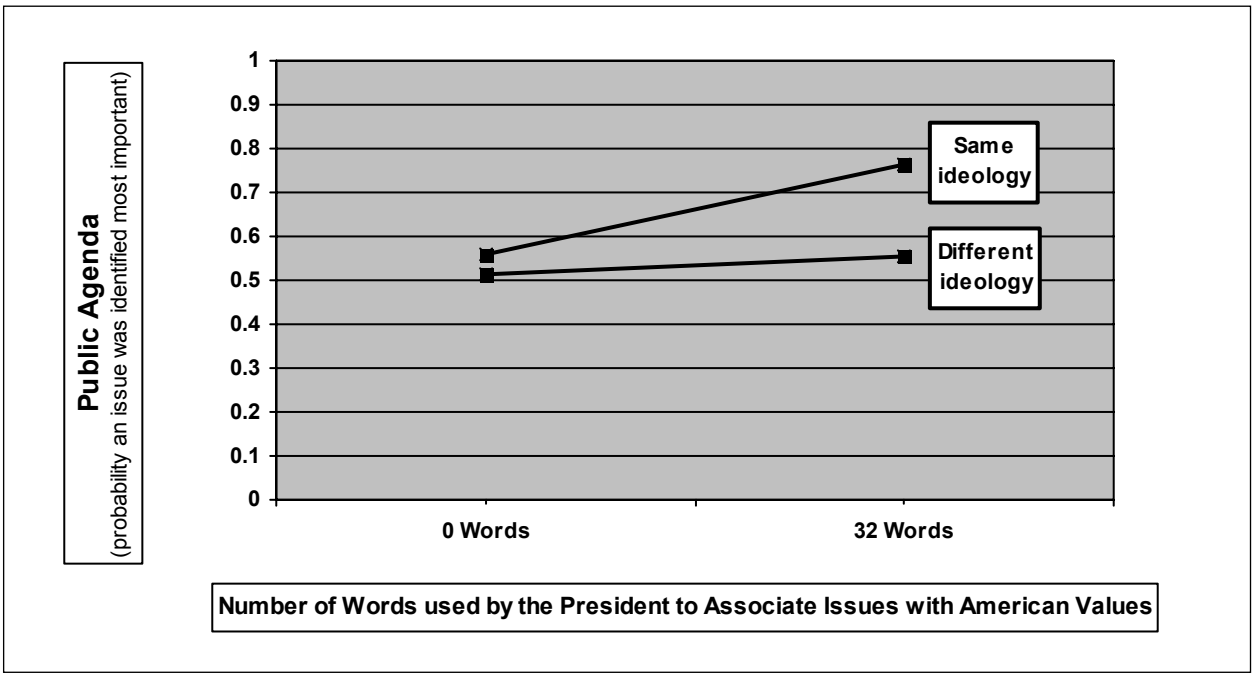

FIGURE 14. The Moderating Effect of Ideological Orientation on the Relationship Between American Values and the Public Agenda

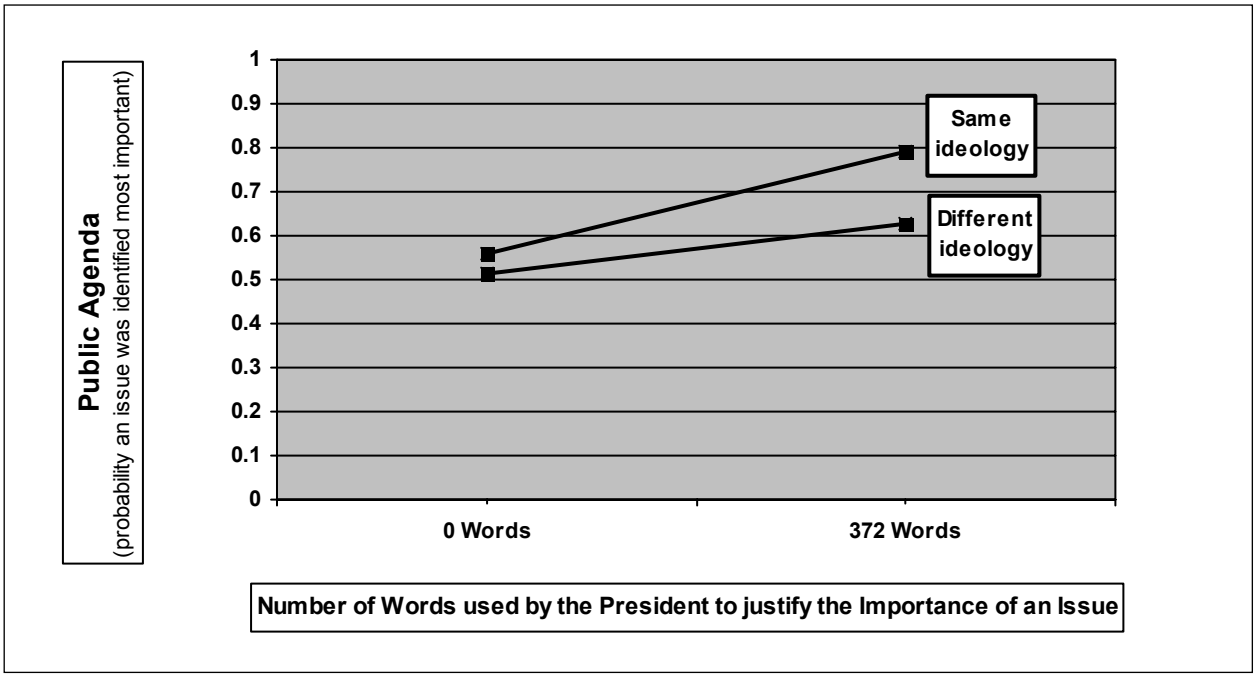

FIGURE 15. The Moderating Effect of Ideological Orientation on the Relationship Between Issue Justification and the Public Agenda

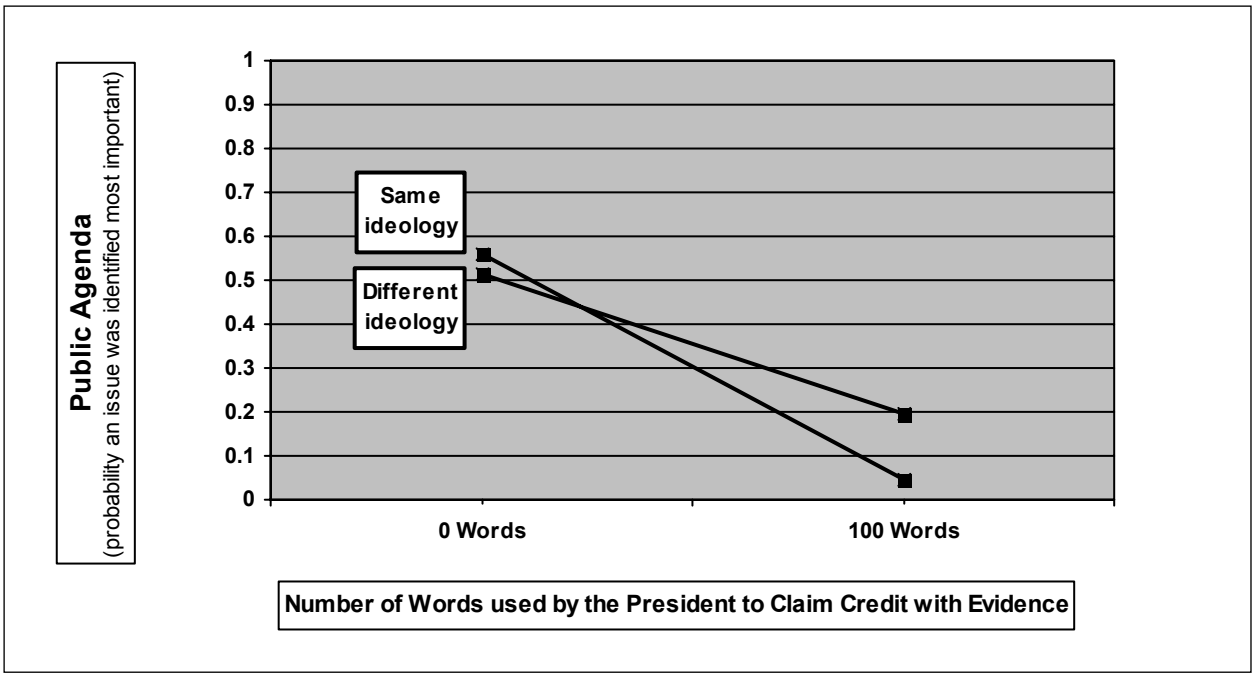

FIGURE 16. The Moderating Effect of Ideological Orientation on the Relationship Between Credit Claiming with Evidence and the Public Agenda

Also, respondents with the same ideological orientation as the president were more heavily influenced by the president's use of issue justifications than respondents with the opposite ideological orientation. When presidents justified the importance of issues in their speeches (372 words), respondents with the opposite ideological orientation of the president were an average of only 7% more likely to choose that issue as the most important. But the influence of issue justifications was an average of 22% *greater* among respondents with the same ideological orientation as the president than among respondents with the opposite ideological orientation. Thus, respondents with the same ideological orientation as the president were an average of 29% more likely to identify an issue as the nation's most important problem when presidents justified that issue to the maximum extent observed.

While presidents used credit claiming with evidence to dampen public concern among respondents whose ideological views differed from the president, this rhetorical appeal was even

more effective among respondents who shared the same ideological orientation as the president. Respondents who differed from the president in their ideological views were an average of 30% *less* likely to identify an issue as most important if presidents cited evidence of success in dealing with that issue. Furthermore, the influence of credit claiming with evidence was an average of 58% *greater* among respondents with the same ideological orientation as the president than among respondents with the opposite ideological orientation. Taken together, when presidents cited evidence in their attempts to claim credit for addressing an issue to the maximum extent possible, respondents of the same ideological orientation as the president were an average of 88% *less* likely to identify that issue as most important.

The significance of several of the uninteracted effects attests to the influence of presidential rhetoric, even among respondents whose ideological views differed from the president's. When presidents appealed to Congress on an issue (105 words), respondents with the opposite ideological orientation as the president were an average of 21% more likely to consider that issue to be most important. Moreover, when presidents discussed an issue at the end of a speech in which they mentioned 24 issues, respondents with the opposite ideological orientation as the president were an average of 16% *less* likely to identify those issues as most important. Finally, when presidents compared their policy for addressing an issue with policies suggested by others to the maximum extent, respondents with the opposite ideological orientation as the president were an average of 39% more likely to identify that issue as the most important problem facing America.

In addition to the importance of presidential rhetoric, a number of other factors proved to be influential determinants of the public agenda. Economic conditions, important events, and the

prior public agenda were influential in the Partisan Identification and Ideological Orientation Models, whereas prior media coverage was significant in just the Partisan Identification Model.

4. Demographic Characteristics

The final set of hypotheses concerns the role played by respondents' demographic characteristics in the presidential agenda setting process. Respondents who belonged to demographic groups in the Democratic coalition were expected to be more responsive to the rhetoric of Democratic presidents, and respondents who belonged to groups in the Republican coalition were expected to be more responsive to the rhetoric of Republican presidents. The influence of membership in the Democratic coalition was tested using survey data collected after Clinton's 1994 address. The influence of membership in the Republican coalition was determined using survey data collected after the speeches given by Reagan in 1982, George H.W. Bush in 1992, and George W. Bush in 2001. Because it is entirely possible that what is really being measured by demographic characteristics is partisan identification or ideological orientation, control variables for both were included in the model.[39]

The results in Table 13 show that poor, African-American, urban residents employed by labor unions were more likely to identify an issue mentioned in President Clinton's 1994 State of the Union Address as most important than respondents who did not share these characteristics. Figures 17 through 19 are used to represent the moderating effect of membership in the Demographic coalition in graphical form. The uninteracted Democratic coalition variable indicates that for each additional group in the Democratic coalition to which a respondent belonged, that respondent was an average of 19% more likely to identify an issue mentioned by Clinton as the most important problem facing America. Or, in other words, respondents who

[39] The measures of partisan and ideological predispositions are the same as those included in the models designed to test Hypotheses 4 and 5. For purposes of presentation, these results are not shown but are available upon request from the author.

TABLE 13. Democratic Coalition and the Relationship Between Presidential Rhetoric and the Public Agenda

Independent Variable	Logit	Se	Exp(b)
Presidential Rhetoric			
Issue attention	.024	.004	1.0002**
Issue justification	.169	.026	1.0007**
Credit claiming without evidence	-.092	.051	0.9995
Credit claiming w/ evidence	-.159	.031	0.9959**
Public appeals	.873	.126	1.0094**
Congressional appeals	.089	.030	1.0039*
Fear appeals	-.002	.004	0.9998
American values	.001	.002	1.0001
Compare and contrast	.401	.059	1.0009**
Foreign policy	.007	.011	1.0000
Agenda size	___	___	___
Issue order	-.057	.108	0.9997
Democratic Coalition	.282	.030	1.1901**
Interactions			
Dem. Coalition x Issue attention	.003	.001	1.0001**
Dem. Coalition x Issue justification	.005	.001	1.0005**
Dem. Coalition x Credit claiming without evidence	-.013	.004	0.9991*
Dem. Coalition x Credit claiming w/ evidence	-.042	.012	0.9988**
Dem. Coalition x Public appeals	.009	.013	1.0000
Dem. Coalition x Congressional appeals	.042	.013	1.0021*
Dem. Coalition x Fear appeals	.001	.003	1.0000
Dem. Coalition x American values	.001	.002	1.0000
Dem. Coalition x Compare and contrast	.010	.006	1.0000
Dem. Coalition x Foreign policy	.007	.009	1.1000
Dem. Coalition x Agenda size	___	___	___
Dem. Coalition x Issue order	-.066	.020	0.9914*
Individual Presidents			
Bush I	.016	.013	1.0169
Clinton	.073	.049	1.0276
Bush II	.086	.036	1.0395
Contextual Factors			
Prior public agenda	.124	.031	1.1327**
Prior media coverage	.040	.015	1.0466*
Economic conditions	.964	.150	3.2044**
Important Events	.016	.013	1.0251
Pseudo R^2	.421		
N	10,377		

Note: Democratic Coalition model estimated using logistic regression analysis. The dependent variable is the Public Agenda. *p <.01; **p <.001. Two-tailed.

belonged to all four demographic groups in the Democratic coalition were an average of 76% more likely to identify an issue mentioned by Clinton as the most important problem than respondents who belonged to no such groups.

Respondents' demographic characteristics also proved to be an influential moderator of the relationship between presidential rhetoric and the public agenda. The interaction terms measure the average change in the relationship between a given rhetorical appeal and the public agenda, given a one-unit increase in the moderator variable- which, in this case, is Democratic coalition. Issue attention, issue justifications, credit claiming with and without evidence, congressional appeals, and issue order were all more influential among respondents who belonged to the Democratic coalition than among respondents who did not. As a subset of these variables, the following takes up for discussion the moderating effect of the Democratic coalition variable on the influence of issue attention, issue justifications, and credit claiming with evidence. The effect of membership in the Democratic coalition on the influence of these presidential rhetoric variables is shown graphically in Figures 17 through 19.

The uninteracted effect of issue attention suggests that when presidents used 1703 words to discuss an issue, respondents who belonged to no groups in the Democratic coalition were, on average, 35% more likely to identify that issue as the most important problem. Additionally, the interaction term suggests that the influence of issue attention on the public agenda was an

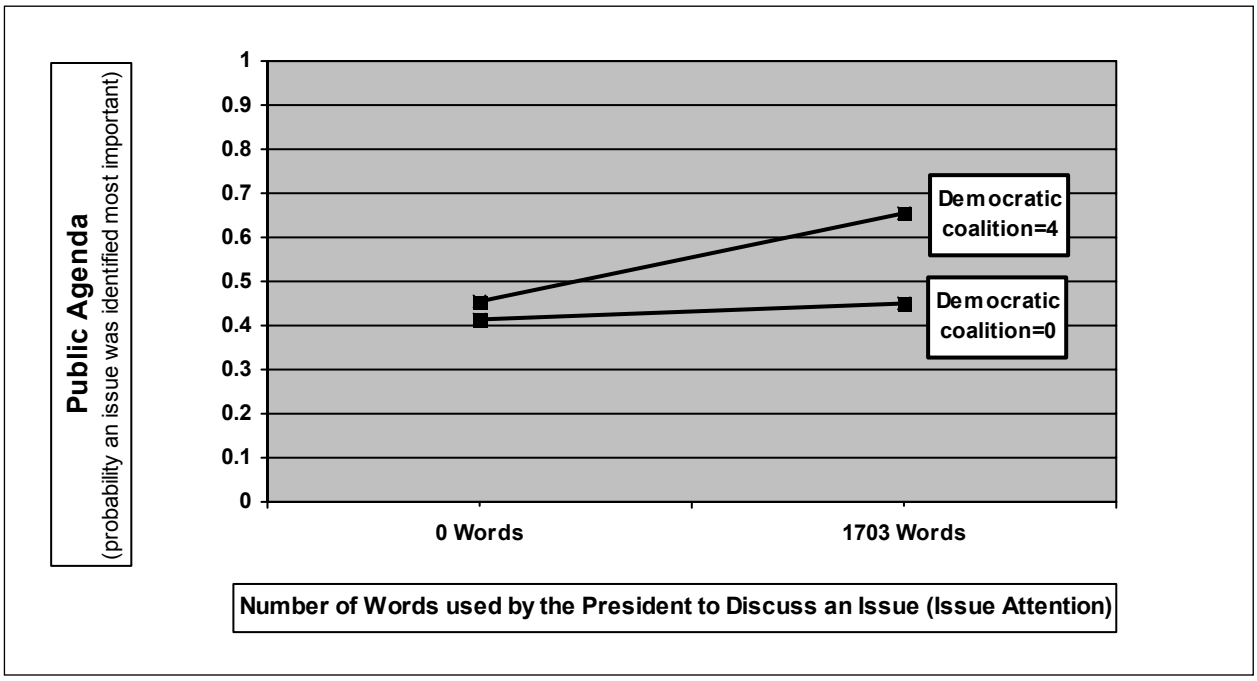

FIGURE 17. The Moderating Effect of Democratic Coalition on the Relationship Between Issue Attention and the Public Agenda

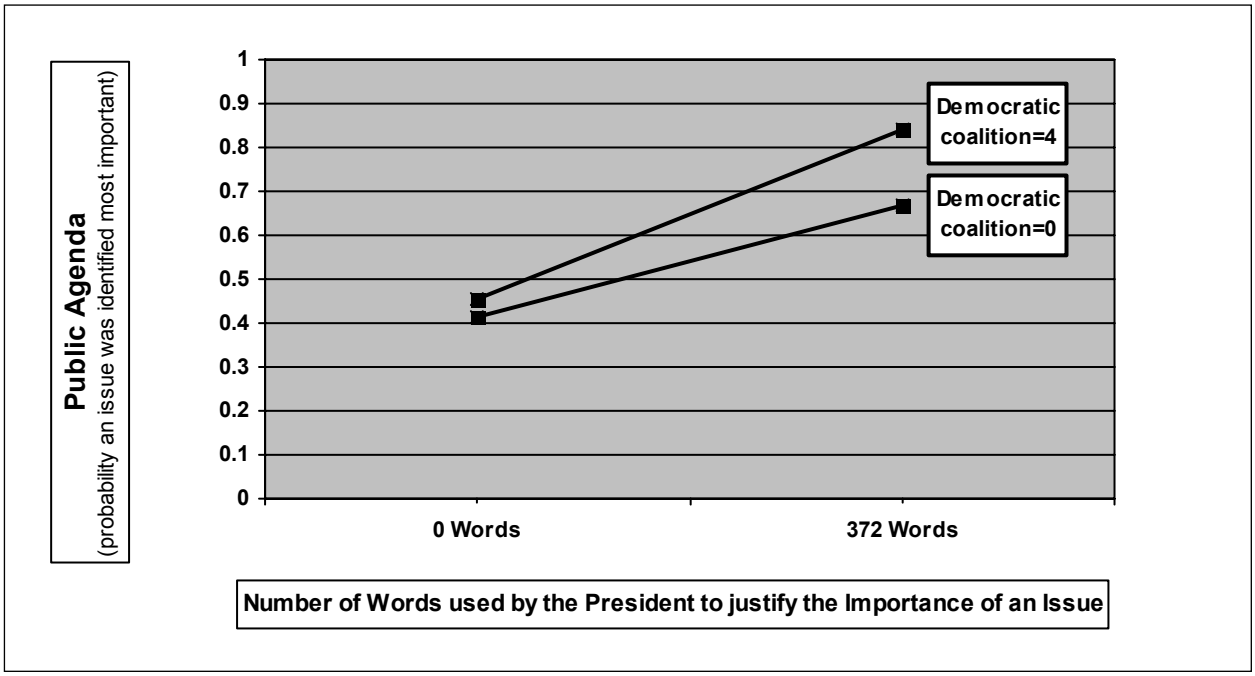

FIGURE 18. The Moderating Effect of Democratic Coalition on the Relationship Between Issue Justification and the Public Agenda

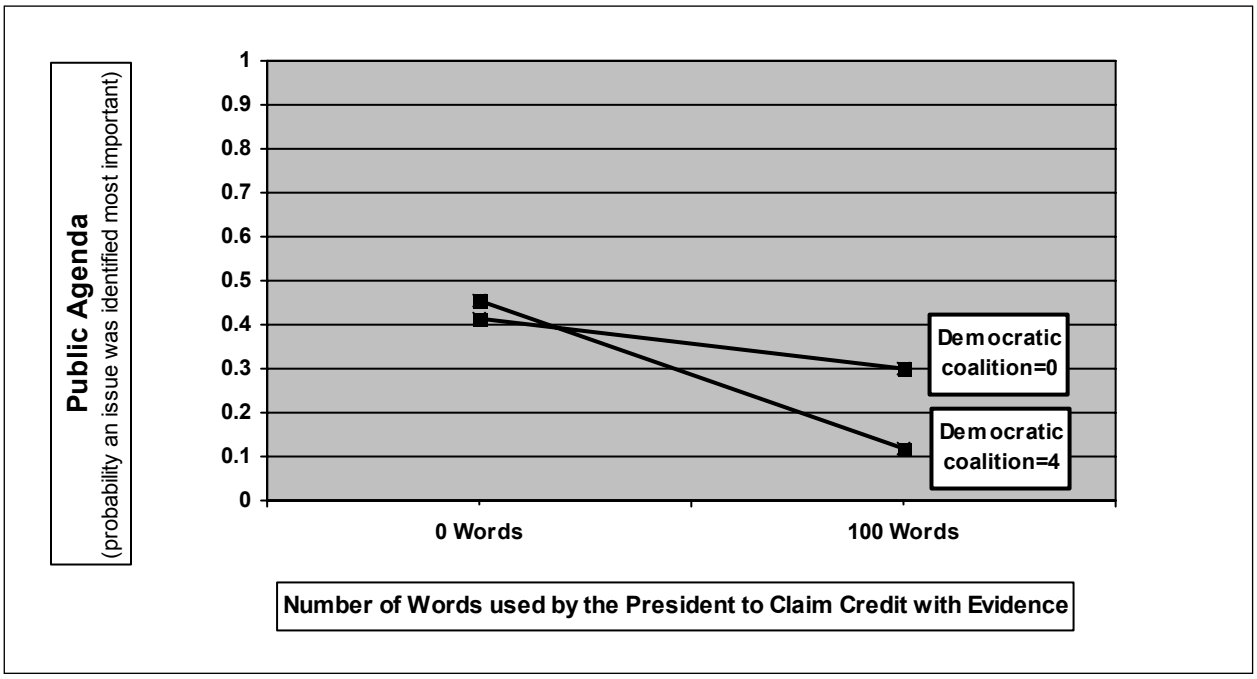

FIGURE 19. The Moderating Effect of Democratic Coalition on the Relationship Between Credit Claiming with Evidence and the Public Agenda

average of 17% greater *for each additional group* in the Democratic coalition to which a respondent belonged. Thus, when Clinton discussed an issue to the fullest extent observed, respondents who belonged to one group were an average of 52% more likely to identify that issue as most important, respondents who belonged to two groups were 69% more likely, respondents who belonged to three groups were 86% more likely, and respondents who belonged to all four groups were 103% more likely to identify that issue as most important.

As another example, the uninteracted effect of issue justifications demonstrates that respondents who belonged to no groups in the Democratic coalition were an average of 10% more likely to identify an issue as most important when presidents justified the importance of that issue to the maximum extent (372 words). The interaction shows that the influence of issue justifications was an average of 19% greater *for each additional group* in the Democratic coalition to which a respondent belonged. Thus, when Clinton justified the importance of an

issue, respondents who belonged to all four groups in the Demographic coalition were an average of 86% more likely to identify that issue as the most important problem.

Finally, respondents who belonged to no groups in the Democratic coalition were an average of 43% less likely to identify that issue as most important when Clinton cited evidence of success in dealing with that issue to the maximum possible extent (205 words). The interaction term shows that that the influence of credit claiming with evidence was an average of 13% greater *for each additional group* in the Democratic coalition to which a respondent belonged. Thus, when Clinton justified the importance of an issue, respondents who belonged to all four groups in the Demographic coalition were an average of 95% more likely to identify that issue as the most important problem.

The effects of the uninteracted rhetoric variables show that Clinton's rhetoric influenced the evaluations of issue salience expressed, not only by respondents who belonged to the Democratic coalition, but also by respondents who did not. First, when Clinton appealed for public support on an issue (67 words), respondents who belonged to no groups in the Democratic coalition were an average of 63% more likely to believe that issue represented the nation's most important problem. Second, respondents who belonged to no groups in the Democratic coalition were an average of 24% more likely to identify an issue when Clinton compared his policies for addressing that issue with the policies proposed by others (267 words). Finally, Clinton also set the public agenda by appealing to Congress. When Clinton called on Congress for legislative on an issue (105 words), respondents who belonged to groups in the Democratic coalition were an average of 41% more likely to identify that issue as the nation's most important.

On the other end of the political spectrum, respondents who belonged to groups in the Republican coalition were more receptive to the rhetoric of Republican presidents than

respondents who did not belong to these groups. Wealthy, white, southern Protestants were more likely to identify issues mentioned by Republican presidents as the most important problems facing America than respondents who did not share these characteristics. As the results in Table 14 reveal, membership in the Republican coalition functions as an important moderator of the influence of several rhetorical appeals on the public agenda. In particular, the following discussion considers the moderating effect of the Republican coalition variable on the influence of American values, congressional appeals, and fear appeals. The moderating effect of membership in the Republican coalition is also shown represented graphically in Figures 20 through 22.

The uninteracted effect of American values illustrates that respondents who belonged to no groups in the Republican coalition were an average of 48% more likely to identify an issue as most important when Republican presidents associated that issue with American values to the maximum extent (32 words). However, the interaction term shows that the influence of American values was an average of 8% greater *for each additional group* in the Republican coalition to which a respondent belonged. Thus, when Republican presidents associated issues with American values to the fullest extent possible, respondents who belonged to all four groups in the Republican coalition were an average of 80% more likely to identify that issue as the most important problem.

Congressional appeals issued by Republican presidents were also more influential among respondents who belonged to the Republican coalition. The uninteracted effect of congressional appeals suggests respondents who did not belong to any groups in the Republican coalition were an average of 41% more likely to identify an issue as most important when presidents appealed to Congress for action on that issue to the maximum extent (105 words). Also, the interaction

TABLE 14. Republican Coalition and the Relationship Between Presidential Rhetoric and the Public Agenda

Independent Variable	Logit	Se	Exp(b)
Presidential Rhetoric			
Issue attention	.004	.001	1.0001*
Issue justification	.005	.000	1.0012**
Credit claiming without evidence	-.002	.013	0.9999
Credit claiming w/ evidence	-.023	.004	0.9971*
Public appeals	.008	.012	1.0014
Congressional appeals	.026	.005	1.0039**
Fear appeals	.026	.009	1.0029*
American values	.143	.043	1.0151*
Compare and contrast	.010	.002	1.0011**
Foreign policy	1.08	.420	1.6041
Agenda size	-.044	.019	1.0046
Issue order	-.062	.011	0.9849**
Republican Coalition	.809	.157	2.2453**
Interactions			
Rep. Coalition x Issue attention	.000	.000	1.0000
Rep. Coalition x Issue justification	.002	.000	1.0018**
Rep. Coalition x Credit claiming without evidence	-.007	.002	0.9983*
Rep. Coalition x Credit claiming w/ evidence	-.020	.006	0.9980*
Rep. Coalition x Public appeals	.014	.006	1.0004
Rep. Coalition x Congressional appeals	.010	.003	1.0011**
Rep. Coalition x Fear appeals	.021	.004	1.0022**
Rep. Coalition x American values	.109	.017	1.0026**
Rep. Coalition x Compare and contrast	.000	.001	1.0000
Rep. Coalition x Foreign policy	.494	.217	1.2611
Rep. Coalition x Agenda size	-.016	.007	0.9984
Rep. Coalition x Issue order	-.011	.006	0.9989
Individual Presidents			
Bush I	.169	.128	1.0215
Clinton	.371	.198	1.0340
Bush II	-.041	.033	0.9964
Contextual Factors			
Prior public agenda	.132	.005	1.147**
Prior media coverage	.016	.062	1.016
Economic conditions	.105	.001	3.111**
Important Events	.920	.261	2.512**
Pseudo R^2	.279		
N	44,443		

Note: Republican Coalition model estimated using logistic regression analysis. The dependent variable is the Public Agenda. *p <.01; **p <.001. Two-tailed.

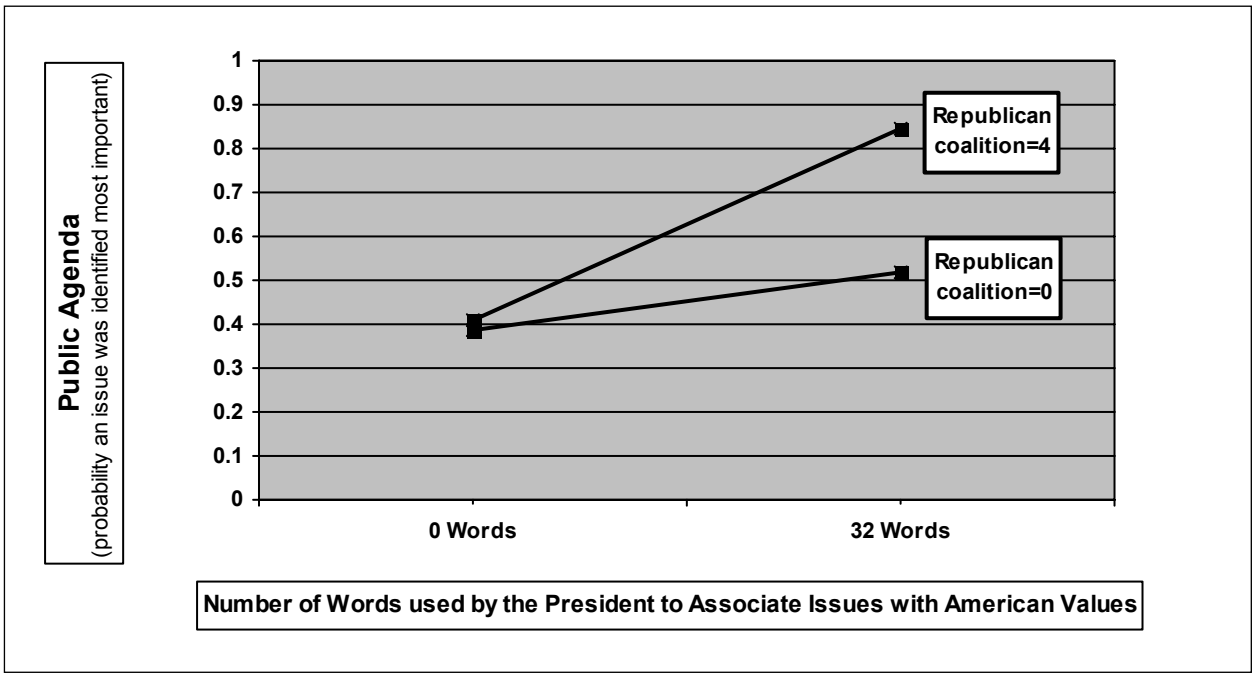

FIGURE 20. The Moderating Effect of Republican Coalition on the Relationship Between Credit Claiming with Evidence and the Public Agenda

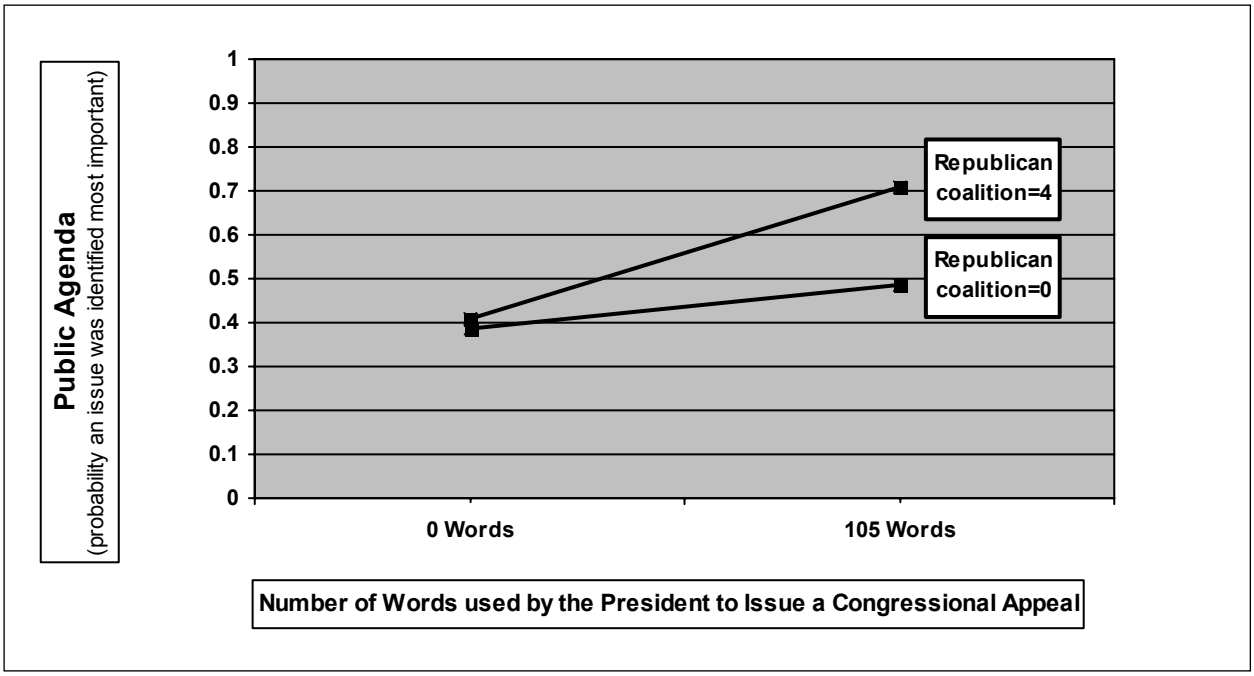

FIGURE 21. The Moderating Effect of Republican Coalition on the Relationship Between Congressional Appeals and the Public Agenda

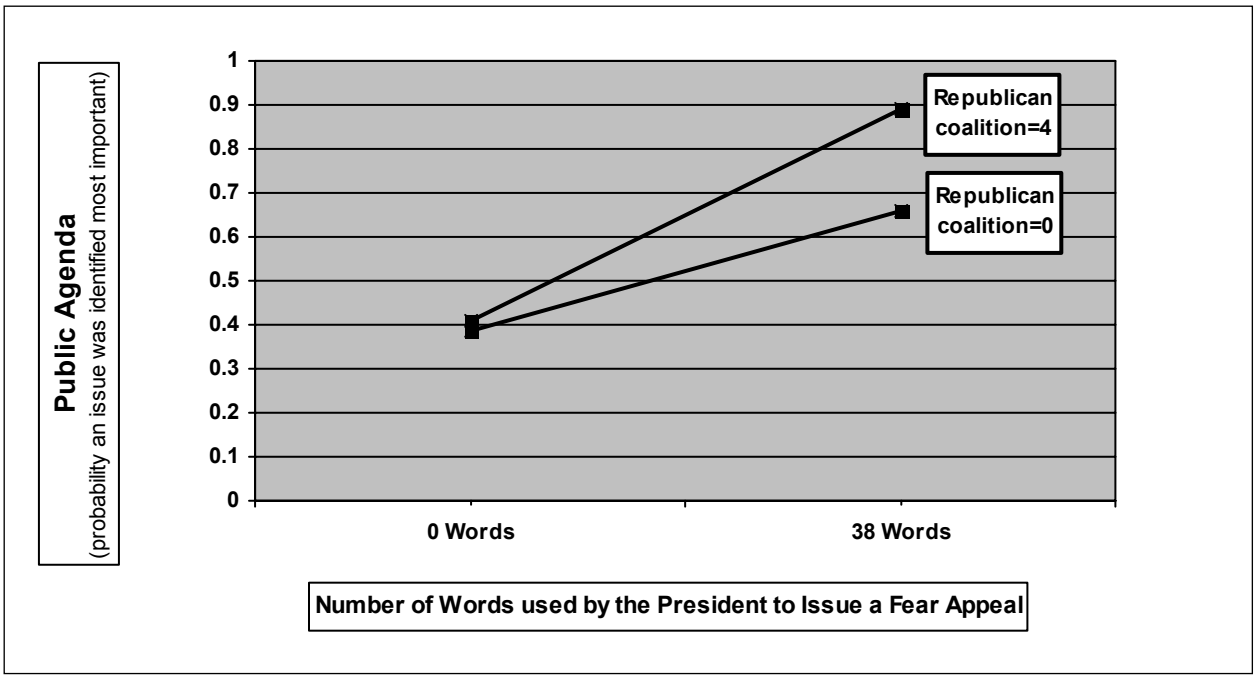

FIGURE 22. The Moderating Effect of Republican Coalition on the Relationship Between Fear Appeals and the Public Agenda

term indicates that the influence of congressional appeals was an average of 12% greater *for each additional group* in the Republican coalition to which a respondent belonged. Consequently, respondents who belonged to all four groups in the Republican coalition were an average of 89% more likely to identify an issue as the nation's most important problem when Republican presidents appealed for congressional action on that issue.

Respondents who belonged to the Republican coalition were more heavily influenced by the fear appeals issued by Republican presidents than respondents who did not belong to the Republican coalition. The uninteracted effect of this variable demonstrates that, when presidents invoked the use of fear appeals in their discussion of an issue to the maximum extent observed (38 words), respondents who did not belong to the Republican coalition were an average of 11% more likely to consider that issue to be the nation's most important problem. The interaction term for this variable shows that the influence of fear appeals was an average of 8% greater *for each*

additional group in the Republican coalition to which a respondent belonged. As a result, when presidents relied on fear appeals in their discussion of an issue, respondents who belonged to all four groups in the Republican coalition were an average of 43% more likely to identify that issue as the most important problem facing America.

The uninteracted effects of the rhetoric variables demonstrate that the influence of the rhetoric used by Republican presidents was not confined to respondents who belonged to groups in the Republican coalition. For example, when Republican presidents relied on substantive justifications of the importance of issues in their speeches (372 words), respondents who belonged to no groups in the Republican coalition were, on average, 45% more likely to believe that issue represented the country's most pressing problem. Moreover, respondents who belonged to no groups in the Republican coalition were, on average, 29% more likely to identify an issue as most important when Republican presidents compared their policies for addressing that issue with the policies recommended by others (264 words). Also, when Republican presidents cited evidence of progress made in addressing an issue (105), respondents who belonged to no groups in the Republican coalition were, on average, 30% less likely to select that issue as the nation's most important problem.

Finally, the evaluations of issue salience made by respondents in both the Democratic and Republican Coalition models were heavily influenced by several factors in addition to presidential rhetoric. The prior public agenda was significant in the Democratic and Republican coalition models, economic conditions and prior media coverage was significant in the Democratic Coalition Model, important events was significant in the Republican Coalition Model, and partisan and ideological orientation were significant in neither of the models.

5. Individual Presidents

A study based on 4 State of the Union Addresses delivered by four different presidents hardly provides an appropriate platform from which to draw broad, sweeping generalizations concerning the ability of the President of the United States to influence public opinion. At the same time, however, the data used in this study do shed light on the ability of our four most recent presidents to craft rhetorical appeals capable of influencing individual-level perceptions of the public agenda.

Reagan, dubbed by political commentators as "The Great Communicator," was widely renowned for his charismatic delivery of presidential speeches. And although he never mastered the art of presidential oratory to the extent Reagan did, Clinton was also considered by most to be an effective speech giver. In contrast, neither George W. Bush nor his father considered the nationally televised presidential speech a preferred forum for addressing the public; both seemed more comfortable communicating with the public in more intimate settings with fewer people. The reputed disparities in the rhetorical skills possessed by the four presidents suggest Reagan and Clinton would be more effective agenda setters than their contemporaries, George H.W. Bush and George W. Bush. However, this is not what the data show. In fact, the results reveal no consistent differences in the influence of the four presidents on the public agenda. In only one of the seven models was there a statistically significant difference between the four presidents. In the Presidential Approval Model, George W. Bush was able to increase the salience of issues in mentioned in his 2001 speech by a modest average of 6% greater than Reagan was able to increase the salience of issues mentioned in his 1982 speech. Thus, despite their apparent rhetorical weaknesses, the Bushes were no less effective agenda setters than their supposedly more rhetorically gifted counterparts, Reagan and Clinton.

While this finding contradicts the conventional wisdom concerning the importance of presidents' personal qualities and their ability to persuade the public, it is in accord with previous research that demonstrates highly charismatic presidents were no more effective in leading the public than presidents who were not charismatic (Edwards 2003; Ranney 1985; Sussman 1984). The results of this study also portray the viewers of State of the Union Addresses as relatively sophisticated consumers of presidential rhetoric capable of distinguishing presidential style from substance. While each of the four presidents was able to convince the public that the issues mentioned in their speeches were important, some were more convinced that others. Presidents were significantly more effective in their attempts to influence the evaluations of issue salience expressed by individuals who supported the president, by those who shared the same political predispositions as the president, and by those who belonged to demographic groups in the coalition of the president's party. In the end, the influence of presidents on the public agenda depends, not so much on their charisma, personality, or "stage presence," but to a far greater extent on their ability to fashion rhetorical appeals capable of convincing the public that the issues mentioned in their speeches represent the most important problems facing America.

F. EVALUATING PRESIDENTIAL RHETORIC

Table 15 provides a comprehensive summary of the results. It reveals the influence of each of the presidential rhetoric variables on the public agenda in each of the models estimated in Study 2. The results suggest a number of important findings. First, it apparent from the empirical results that Study 2 provides for a more efficient estimate of the influence of presidential rhetoric than Study 1. Unlike the data used in Study 1, the data in this study distinguish between respondents who watched the speech and those who did not watch the speech. The advantage of

TABLE 15. Summary Table for Study 2: Presidential Rhetoric and Individual-Level Assessments of Issue Salience

		Presidential Support		*Political Predispositions*		*Partisan Coalitions*	
Independent Variable	Exposure to Speech Model	Presidential Vote Choice Model	Presidential Approval Model	Partisan Identification Model	Ideological Orientation Model	Democratic Coalition Model	Republican Coalition Model
Presidential Rhetoric							
Issue attention	×	✓	✓	✓	×	✓	✓
Issue justification	✓	✓	✓	✓	×	✓	✓
Credit claiming w/out evi.	×	×	×	✓	✓	×	×
Credit claiming w/evi.	✓	✓	✓	×	✓	✓	✓
Public appeals	✓	✓	×	×	✓	✓	×
Congressional appeals	×	×	✓	×	✓	✓	✓
Fear appeals	✓	×	×	×	×	×	✓
American values	×	×	×	✓	×	×	✓
Compare and contrast	×	✓	✓	✓	✓	✓	✓
Foreign policy	×	×	×	×	×	×	×
Agenda size	×	×	✓	×	✓	—	×
Issue order	×	✓	×	✓	✓	×	✓
Moderator Variables							
Exposure to speech	✓	—	—	—	—	—	—
Presidential vote choice	—	✓	—	—	—	—	—
Presidential approval	—	—	✓	—	—	—	—
Partisan identification	—	—	—	✓	—	—	—
Ideological orientation	—	—	—	—	✓	—	—
Democratic coalition	—	—	—	—	—	✓	—
Republican coalition	—	—	—	—	—	—	✓
Interactions							
Issue attention	✓	✓	✓	✓	×	✓	×
Issue justification	✓	✓	✓	✓	✓	✓	✓
Credit claiming	✓	×	×	✓	✓	✓	✓
Credit claiming w/ evi.	×	✓	✓	✓	✓	✓	✓
Public appeals	✓	×	×	×	×	×	×
Congressional appeals	✓	✓	✓	✓	✓	✓	✓
Fear appeals	✓	✓	✓	✓	×	×	✓
American values	×	✓	×	✓	✓	×	✓
Compare and contrast	×	×	✓	×	×	×	×
Foreign policy	✓	×	×	×	×	×	×
Agenda size	×	✓	✓	×	✓	—	×
Issue order	✓	×	×	✓	✓	✓	×

Note: This table summarizes the results from the models in Study 2 that estimate the influence of presidential rhetoric on the Public Agenda. Each presidential rhetoric variable under the "Interactions" heading represents the influence of a rhetoric variable when interacted with a particular moderator. Checkmarks denote statistically significant variables, Xs denote nonsignificant variables. Hyphens denote variables not in the model.

being to able to make such a distinction is confirmed by the results of the Regression Model. They suggest that, when presidential rhetoric is influential, it is usually influential *only* among respondents who actually watched the president's speech. In fact, the uninteracted effect of exposure to the president's speech demonstrates that those who watched the speech were over 4.5 times more likely to identify an issue in that speech as the most important problem facing America- the strongest effect in any of the seven models estimated. While respondents do in fact learn about the president's speech indirectly through media coverage, as Study 1 demonstrates, the results in this study show that a significant portion of this influence is felt directly, among respondents who actually watched the president's speech.

Second, many of the presidential rhetoric variables significant in Study 1 were discovered in Study 2 as important determinants of the public agenda. Issue attention, issue justifications, congressional appeals, and both forms of credit claiming proved to be consistent, strong determinants of the public agenda in both Study 1 and 2. Two notable exceptions to this pattern of consistency are the influence of foreign policy and public appeals. While Study 1 and previous research (e.g. Cohen 1995) suggests presidents are effective in placing foreign policy issues on the public agenda than domestic issues, the results of Study 2 reveal no such advantage.
One additional discrepancy in the findings of Study 1 and 2 is found in the differential influence of public appeals. In none of the models estimated in Study 1 was the influence of public appeals on the public agenda statistically significant, whereas the influence proved important in several of the models performed in Study 2. Although any explanation would be speculative, these discrepancies are most likely an artifact of the individual presidents and the particular speeches included in Study 2.

Third, the results of the Democratic and Republican Coalition Models suggest an interesting pattern- namely the significance of public appeals in the former, and American values in the latter. The importance of public appeals is consonant with the conventional wisdom regarding the general populist tendencies of the Democratic Party, especially in comparison to the more elitist propensities of the Republican Party. The importance of American values is consistent with previous research (Barker 2002) that demonstrates the influence of value-based rhetoric used by elite Republican leaders as determinants of public opinion toward policy issues.

Fourth, the present study also suggests normative implications for the study of elite-mass relations. In one sense, the significance of public appeals and fear appeals in several of the models represent a cause for concern, particularly for those worried about the ability of citizens to rise above the rhetorical presidency's (Tulis 1987) baser tendencies. In Study 1, fear appeals proved influential only in media coverage following the president's speech, not public evaluations of issue importance. However, the results of Study 2 suggest that the public does take into account the president's use of fear appeals when it comes to deciding what issues they believe to be most important. On the other hand, the fact that respondents were willing to consider the evidence cited by presidents in their attempts to claim credit, as well as the substantive justification for an issue's importance, suggests a citizenry that is capable of rising above presidents' attempts to exploit public fears and their often crass appeals for public support on the issues and policies mentioned in their speeches.

Finally, the primary findings of this study concern the importance of several moderators of the relationship between presidential rhetoric and the public agenda. Indeed, the influence of presidential rhetoric is in fact greater among those who supported the president, shared the same political predispositions as the president, and belonged to the coalition of the president's party.

An important corollary to this central finding is the impressive influence of presidential rhetoric among those who did *not* share these characteristics. As the results collectively demonstrate, while presidential rhetoric was more influential among those predisposed to agree with the president, presidents were also able to use their rhetoric to influence the evaluations of issue salience expressed by respondents who *did not* support the president, share the same partisan and ideological predispositions, or belong to demographic groups in the coalition of the president's party. Simply put, presidents are able to use the rhetoric in their State of the Union Address to influence the public agenda, not just among respondents predisposed to agree with the president, but also among respondents who are not so predisposed.

Why should this be the case? That is, why should presidents be able to affect the evaluations of issue salience made even by respondents who are most likely to disagree with them on most political matters? The influence of presidential rhetoric among those predisposed to disagree with the president is explained in large measure by the difference between agenda setting and other political decision making contexts. The research on presidential influence clearly indicates that presidents are, generally speaking, unable to use their speeches to effect meaningful changes in the policy preferences of their audience. Not only are individuals predisposed to disagree with the president less likely to even watch the speech, but even if they do they are unlikely to surrender their beliefs and admit defeat to a president with whom they disagree with on most political issues anyway.

The dynamics of the agenda setting process are likely to play out somewhat differently, however. For the president to be successful in setting the public agenda requires only that an individual agree that an issue *should* be addressed, not *how* that issue should be addressed. It is probably much easier for respondents predisposed to disagree with the president to concede that

an issue mentioned in the State of the Union Address is important, than it is for those respondents to admit their position on that issue is incorrect, and the president's correct. After Clinton's 1994 State of the Union Address, there was a sharp increase in the number of Americans who believed the issue of health care represented the nation's most important problem, even among Republicans and other groups predisposed to disagree with President Clinton's views on health care. As we soon found out, conservatives, Republicans, and individuals from a number of other groups did indeed have very different ideas about the size and shape health care reform should ultimately take, a fact that ultimately led to the defeat of President Clinton's ambitious health care reform proposal. Thus, while President Clinton was able to convince a broad cross-section of Americans that the issue of health care should be addressed by government, he was ultimately unable to convince us how it should be addressed.

VII. STUDY 3: AN EXPERIMENTAL ANALYSIS OF PRESIDENTIAL RHETORIC

A. INTRODUCTION

On January 7, 2003, just one day before the State of the Union Address, George W. Bush gave a speech to the Economic Club of Chicago in Chicago, Illinois. While this speech addressed a number of issues – including the prospects for war against Iraq, international terrorism, and corporate responsibility – its principal focus was the economy. The objective of the experimental analysis conducted in Study 3 is to determine whether Bush was able to use the rhetoric in this particular speech to influence subjects' perceptions of the importance of the economy. More precisely, Study 3 estimates the influence of President Bush's use of *issue justification*, *congressional appeals*, and *credit claiming with evidence* on subjects' perceptions of the importance of the economy.

The issue of the economy was chosen as the subject of this analysis several reasons. Unlike many other issues on which public opinion is relatively stable, opinions concerning the importance of the economy are in a constant state of fluctuation. Perceptions of the economy frequently change as new information relevant to the performance of the economy is received. Important sources of such information include the news media (Dalton, Beck, and Huckfeldt 1998; Duch, Palmer, and Anderson 2000; Hetherington 1996; MacKuen, Erikson, and Stimson 1996; Mondak, Mutz, and Huckfeldt 1999; Mutz 1992, 1994; Nadeau et al. 1999; Sniderman Brody and Tetlock 1991; Weatherford 1983), interpersonal communication (Kinder, Rosenstone, and Hansen 1983; Huckfeldt and Sprague 1987, 1995), retrospective evaluations of economic

performance (Conover, Feldman, and Knight 1986; Fiorina 1981; Lewis Beck 1985), as well as citizens' personal financial situations (Chong, Citrin, and Conley 2001; Downs 1957; Kramer 1971). The purpose of Study 3 is to determine whether presidential rhetoric may be counted among these sources of influence as an important determinant of economic perceptions.

Selection of issue justifications, congressional appeals, and credit claiming with evidence was based on several factors. First, these three persuasive appeals were consistently identified in the analyses conducted in Studies 1 and 2 as among the most effective rhetorical appeals used by presidents in their State of the Union Addresses. Study 3 seeks to uncover additional corroborative evidence of their influence. If President Bush was able to influence perceptions of the importance of the economy in his January 7 speech, Studies 1 and 2 suggest that this influence may well result from his justification the issue's importance, his appeals to Congress for legislative on the issue, and his attempts to claim credit for success already achieved in addressing the economy. Moreover, the further evaluation of these three forms of presidential rhetoric holds implications for the future study of presidential influence. First, while Cohen (1995) demonstrates that ideological justifications of an issue's important is not an effective tactic of persuasion, Studies 1 and 2 indicate that presidents need not resort to ideological defenses of an issue's importance. Rather, presidents may be able to heighten an issue's importance among the public by simply arguing it is important. Clarifying the nature and extent of the influence of substantive appeals remains an important task in the study of presidential persuasion. Second, the consistently robust influence of congressional appeals coupled with the relatively weak influence of public appeals suggests a public that favors congressional appeals as its chosen cue for issue importance. Study 3 offers additional evidence bearing on the public's reliance on congressional appeals as an indicator of issue importance. Finally, Study 3 provides

yet another proving ground for the effectiveness of credit claiming as a tactic of political persuasion.

While Mayhew (1974) considered credit claiming as a strategy used by members of Congress to enhance their reelection prospects, the results of Studies 1 and 2 suggest this strategy may have wider application to the study of elite behavior and its influence. Study 3 seeks further evidence to help answer the question of whether credit claiming, previously confined to the study of congressional elections, also provides insight into president's relationship with the public.

To complement the survey-based analyses in Studies 1 and 2, Study 3 conducts an experimental analysis of presidential rhetoric. The experimental method offers additional leverage in the attempt to evaluate the president's influence on the public agenda. For one, an experimental analysis, combined with Studies 1 and 2, provides a "triangulation across multiple methods" useful in alleviating doubts that particular findings are method-bound (Kinder Palfrey 1993; Webb et al. 1966). As Webb states, "When a hypothesis can survive the confrontation of a series of complementary methods of testing, it contains a degree of validity unattainable by one tested within the more constricted framework of a single method (1966, 174)." Also, made possible by the random assignment of subjects to experimental and control groups, Study 3 enables a more direct test of the causal mechanisms than Studies 1 and 2. Further, the use of random assignment also eliminates the problem of selection bias discussed in Study 2. By randomly assigning those predisposed to agree *as well as* those predisposed to disagree with the president to watch the president's speech, Study 3 avoids the problem of selection bias. Finally, unexplored to this point is the role of political sophistication. Unlike Studies 1 and 2, Study 3 incorporates items necessary for investigating the manner and extent to which subjects' political sophistication affects the ability of presidents to set the public agenda.

The January 7, 2003 speech was selected as the source of the presidential rhetoric examined in this study for three primary reasons. First, this particular speech was broadcast live to a national television audience by CNN, MSNBC, and FOX News. Unlike many presidential speeches that are targeted toward particular segments of the population, this speech was clearly intended for a mass audience and discussed many of the same issues and relied on many of the same arguments incorporated in the State of the Union Address just a day later. Second, this speech was chosen in part because the rhetoric contained therein was not "time-bound" and arguably still relevant to the environmental conditions present at the time the experiment was conducted. Finally, the January 7 speech was the only presidential speech delivered in the year 2003 in which President Bush invoked multiple rhetorical appeals in his discussion of the economy.

B. PRESIDENTIAL RHETORIC AND ECONOMIC PERCEPTIONS: AN EXPERIMENTAL ANALYSIS

Study 3 is based on the participation of 340 undergraduate students enrolled in undergraduate psychology and political science courses at the University of Pittsburgh during the two-week period from October 7 to October 21, 2003. To examine the influence of George W. Bush's rhetoric on perceptions of the importance of the economy, subjects were randomly assigned to one of five conditions; a *pure control group*, a *control group*, an *issue justification* condition, a *congressional appeal* condition, and a *credit claiming with evidence* condition. All subjects completed a questionnaire, identical in all five conditions, designed to measure a range of political attitudes and predispositions.

Subjects in the pure control group completed the survey, but watched no video. Subjects in the remaining 4 conditions watched different versions of a video in which President Bush is

shown discussing the issue of the economy. Complete descriptions of the content of all 4 videos are provided in Appendix F. Each of these four videos is comprised of two segments. The first segment, which is the same in all four conditions, shows President Bush citing evidence of economic decline, including an increase in the unemployment rate, a decline in the number of manufacturing jobs, and a decline in the stock market. The second segment varies according to the condition. The second segment of the *issue justification* video shows Bush attempting to justify the importance of the economy by citing evidence of economic hardship experienced by citizens, including increasing personal debt, living paycheck-to-paycheck, and the inability to save for their children's education and their own retirement. The second segment of the *congressional appeal* condition shows President Bush appealing to Congress for legislation to deal with the economy, such as the extension of unemployment benefits to those recently out of work. In the second segment of the *credit claiming with evidence* condition, President Bush calls attention to his negotiations with congressional leaders which resulted in the passage of a tax bill which, in his words, represents the largest tax cut in a generation that will provide real and immediate relief to middle-income Americans. The second segment of the *control* video shows President Bush discussing the federal government's role in managing the economy. Unlike the second segments of the issue justification, congressional appeal, and credit claiming videos, the second segment of the control video is not expected to result in a significant change in subjects' perceptions of the importance of the economy. President Bush does not argue the issue is important or should be addressed by Congress, nor does he suggest that action has already been taken to address the economy. This segment was included to ensure that the overall length of the control video was approximately equal to the length of the issue justification, congressional appeal, and credit claiming with evidence videos.

To create the videos to which subjects were exposed, a videotape of President Bush's January 7 speech to the Economic Club of Chicago was obtained in VCR format from Federal Document Clearing House, Inc.[40] Using digital editing software,[41] this video was converted into digital video format and edited for content on a personal computer. Once the editing process was completed, the four videos were saved on CD-ROMs as digital avi files. In the research laboratory, subjects were told that they were participating in a research study examining the communication skills and speechmaking abilities of President George W. Bush. Each subject participating in the study was seated at his or her own computer. Subjects in the pure control group completed the questionnaire, but watched no video. Subjects randomly assigned to a condition that required watching a video were provided with a set of headphones attached to their computer to ensure that the audio from their computer would not disturb other subjects participating in the study. Before watching the video, subjects were instructed to begin filling out their questionnaire. Eventually, subjects reached a page in their questionnaire that directed them to stop answering questions and begin watching the video on their computer. At this point, subjects were instructed in their questionnaire to put on their headphones and press "play" on the *Windows Media Player* already opened and visible on their computer screen. Once the subject pressed the "play" button, *Windows Media Player* initiated playback of the video of President Bush's speech stored on the CD-ROM placed in the CD-ROM drive of that subject's computer. Before President Bush appeared on the screen, an introductory message accompanied by music

[40] Federal Document Clearing House, Inc. is an electronic publisher of transcripts, videotapes, and audio cassettes of business and political news from the world's leading news services, including CNN, CNNfn, Fox News, NPR, CNBC/Dow Jones Business Video, and the Nightly Business Report.

[41] The video of President Bush's speech was converted from analog video, from a VCR tape, to digital video using the digital video editing suite *Pinnacle Studio* version 8.0. *Pinnacle Studio* provides hardware for capturing video from camcorders, VCRs, and DVD players into digital video on a personal computer. It provides the software necessary for the editing of video captured in these formats, and it converts videos into a variety of media formats, including AVI files, MPEG-1 files, MPEG-2 files, VCD, SVCD, VCR, DVD, camcorders, and streaming internet files.

instructed subjects to use this time to adjust the volume on their headsets. This was implemented as a precautionary measure to make sure that, when President Bush did begin to speak, subjects would be able to pay close attention to what he was saying, and not be preoccupied by adjusting the volume on their headset. At the very end of the video, a message appeared on the screen instructing subjects to return to their questionnaires to complete the remaining questions. The portion of the questionnaire subjects completed *prior* to watching the video contained items used to measure the independent variables included in the analysis. The part of the questionnaire subjects were asked to fill out *after* the watching the video contained questions designed to measure the dependent variable and other variables that might plausibly be affected by exposure to the video of the president's speech. Each individual session lasted approximately 30 minutes, and an approximately equal number of subjects were assigned to each of the five conditions.

C. HYPOTHESES

1. Presidential Rhetoric

Of primary interest is the influence of the rhetorical appeals used by President Bush in his January 7 speech on subjects perceptions of the importance of the economy. If President Bush was successful in his attempts to use congressional appeals to increase concern about the economy, then the perceived importance of the economy among subjects in the *congressional appeal* condition should be greater than the perceived importance of the economy among subjects in the *control group*. That is, subjects who watched a video in which Bush cited symptoms of economic decline *followed by* an appeal to Congress to take action to address the economy are expected to believe the economy is more important than subjects who watched a video in which President Bush cited evidence of economic decline *followed by* a discussion of

the role of the federal government in managing the economy. Conversely, if President Bush was able to use credit claiming to reduce concern about the economy, then the perceived importance of the economy among subjects in the *credit claiming with evidence* condition should be *less* than the importance of the economy perceived by subjects in the *control group*. Subjects exposed to the video in which President Bush cited evidence of economic decline, but claimed credit for success achieved in addressing some of its symptoms, should consider the economy to be less important than subjects who were shown a video in which President Bush cited evidence of economic decline and then discussed the role of the government in managing the economy. Formally stated,

> *H1: Subjects in the issue justification and congressional appeal conditions are expected to believe the economy is more important than subjects in the control group, ceteris paribus*.
>
> *H2: Subjects in the credit claiming with evidence condition are expected to believe the economy is less important than subjects in the control group, ceteris paribus*.

2. Presidential Support

While exposure to President Bush's speech is expected to result in heightened concern about the economy, not all subjects are likely to be equally influenced by the president's rhetoric. To the contrary, the results of Study 2 highlight the importance of political attitudes and predispositions as moderators of the relationship between presidential rhetoric and perceptions of the public agenda. The present study estimates the influence of three classes of moderators- presidential support, political predispositions, and political sophistication.

Findings from the literature on presidential elections demonstrate that evaluations of the candidates' personal traits often function as important determinants of voting preferences in both *general elections* (e.g. Stokes 1966, Markus 1988b, Kinder 1983, 1986, Wattenberg 1991, Miller and Shanks 1996, Germond and Witcover 1981, Moore 1995) as well as *nominating elections*

(Barker and Lawrence 2002; Norrander 1986; Popkin 1991; Stone and Rapoport 1994; Stone, Rapoport, and Atkeson 1995). Also, Edwards (1985) has shown that the public' evaluations of the leadership traits exhibited by Ford, Carter, Reagan, and Nixon were significantly related to the public's approval of these presidents. Whether evaluations of presidents' personal traits affect their ability to set the public agenda has not been explored. From the perspective of this study, subjects who expressed favorable evaluations of President Bush's personal characteristics are likely to place greater emphasis on his rhetoric in evaluating the importance of the economy than subjects who expressed unfavorable evaluations of Bush's personal characteristics. Subjects with favorable evaluations may simply be more willing to consider presidential rhetoric in deciding how important they believe the issue of the economy to be. Subjects with unfavorable evaluations may simply tune out the president's words and evaluate the economy's importance based on other sources of information to which they have been exposed. Formally speaking,

> *H3: The influence of presidential rhetoric on the perceived importance of the economy is expected to be greater among subjects who expressed favorable evaluations of President Bush's personal characteristics than among subjects who expressed unfavorable evaluations of President Bush's personal characteristics, ceteris paribus.*

As the review of the literature has previously underscored, presidents with higher approval ratings are, generally speaking, more effective in using their speeches to influence the public's policy preferences than presidents who do not enjoy high approval ratings (Ragsdale 1984; Ragsdale 1987; Brace and Hinckley 1992, 1993). Of more direct relevance are the results of Study 2, which collectively demonstrate that individuals who approved of the president were more likely than individuals who disapproved of the president to consider presidential rhetoric in their evaluations of issue importance. In the case of the present study, the influence of President Bush's issue justification, congressional appeal, and credit claiming with evidence is expected to be greater among subjects who expressed strong approval of the president's performance in

office than among subjects who strongly disapproved of the president's performance. In formal terms,

> *H4: The influence of presidential rhetoric on the perceived importance of the economy is expected to be greater among subjects who expressed strong approval of the president's performance than among subjects who expressed strong disapproval of the president's performance, ceteris paribus.*

3. Political Predispositions

While political predispositions are considered to be the among the most important determinants in numerous studies encompassing a diverse range of decision making contexts, their importance in the presidential agenda setting process has not been established. If the partisan and ideological predispositions of the president's audience matter, then subjects who share similar political predispositions with President Bush should place greater emphasis on his rhetoric in evaluating the importance of the economy than subjects with the opposite political predispositions. Simply put, strong Republican and strong conservative subjects are likely be more willing to listen to what President Bush has to say about the economy than strong Democratic and liberal subjects. Formally,

> *H5: The influence of presidential rhetoric on the perceived importance of the economy is expected to be greater among strong Republican subjects than among strong Democratic subjects, ceteris paribus*.

> *H6: The influence of presidential rhetoric on the perceived importance of the economy is expected to be greater among strong conservative subjects than among strong liberal subjects, ceteris paribus*.

4. Political Sophistication

The remaining hypotheses address the role of political sophistication in the agenda setting process. Generally speaking, the politically sophisticated are more likely to tune into watch presidential speeches than their less sophisticated counterparts (Welch 1997, 2000; Edwards 2003; Leighley 1991; Tan 1980). However, in an experimental study such as this, the decision to

watch the president's speech is removed from the equation. By randomly assigning subjects to experimental conditions, in which subjects were exposed to presidential rhetoric, and a pure control group, in which subjects were not exposed to such rhetoric, the problem of selection bias was avoided. As a result, the dynamics of political sophistication are expected to play out somewhat differently in Study 3. Generally speaking, more politically sophisticated subjects are expected to place greater weight on President Bush's rhetoric than less politically sophisticated subjects.

The concept of political sophistication has taken on a wide variety of manifestations in the behavior literature. Some have regarded the level of ideological constraint on the opinions expressed by the public as an indicator of political sophistication (Converse 1964, Nie, Verba, and Petrocik 1976, Pierce 1970; Pierce and Hagner 1982; Campbell et al. 1960). Others have considered the structure and consistency of public attitudes as a measure of political sophistication (Conover and Feldman 1984; Converse 1970; Fiske and Kinder 1981; Jackson and Marcus 1975). The definition of political sophistication employed in this study reflects more recent research which relies on political knowledge (Althaus 1998; Barker and Lawrence, forthcoming; Bartels 1996; Cassel and Lo 1997; Delli Carpini and Keeter 1996; Duch, Palmer and Anderson 2000; Lupia 1994; Luskin 1987; Mondak 2000; Neumann 1986; Smith 1989), and political awareness, or attentiveness (Fiske, Kinder, and Larter 1983; Krosnick 1990; Neumann 1986; Zaller 1990), to measure an individual's level of political sophistication.

The definition of political sophistication employed in this study was informed by a dual-process perspective on attitude change. In general, dual-process theories of persuasion posit two alternative routes to attitude change (Chaiken 1980, 1982, 1987; Chaiken and Eagly 1983; Chaiken et al. 1989). The *systematic route* is followed by individuals who engage in thoughtful,

deliberative, and comprehensive consideration of persuasive messages (Chaiken et al.1989). In contrast, the *heuristic route* is conceptualized as a more limited mode of information processing in which individuals eschew effortful consideration of messages and are likely to rely instead on simple decision rules, or cognitive heuristics, to formulate their judgments or decisions (Chaiken 1980, 1987; Chaiken et al. 1989; Tversky and Khaneman 1974). One dual-process theory in particular, the Elaboration Likelihood Model (ELM), stipulates the conditions under which individuals are most likely to engage in systematic processing (Petty and Cacioppo 1981, 1984a, 1984b, 1986a, 1986b). According to Petty and Cacioppo, whether individuals follow the systematic route to persuasion depends on the extent to which they possess the *ability* and *motivation* to engage in thoughtful, deliberate, and comprehensive processing of persuasive messages.

In the context of the present study, the Elaboration Likelihood Model suggests that subjects with the greatest ability and motivation to engage in the systematic processing of President Bush's rhetoric are the subjects most likely to be influenced by that rhetoric. To explore the moderating effect of ability on the relationship between presidential rhetoric and perceived economic importance, this study relies on a scale of *political knowledge* that measures subjects' knowledge of basic political information. Subjects with higher levels of political knowledge are expected to be better equipped than their less knowledgeable counterparts to understand presidential rhetoric, commit it to memory, and apply it to later decision making tasks. Formally stated,

> *H7: The influence of presidential rhetoric on the perceived importance of the economy is expected to be greater among subjects with higher levels of political knowledge than among subjects with lower levels of political knowledge, ceteris paribus*.

Subjects with the motivation to engage in the systematic processing of persuasive messages are also expected to be more influenced by President Bush's rhetoric than subjects who are not so motivated. To operationalize the concept of motivation, this study relies on an additive scale of *political attentiveness* composed of items measuring subjects' interest in politics, the extent to which they discuss politics with their friends and family, and the frequency with which they seek out media coverage of politics in the newspaper, on the radio, in national network news, and on the 24-hour news channels (CNN, Fox News, and MSNBC). Subjects who are motivated to engage in systematic processing, that is, subjects who are interested in politics, who discuss politics with their friends and family, and who frequent media coverage of politics, are expected to pay closer attention and, as a result, be more heavily influenced by President Bush's rhetoric than subjects who do not shared these characteristics. In formal terms,

> *H8: The influence of presidential rhetoric on the perceived importance of the economy is expected to be greater among subjects with higher levels of political attentiveness than among subjects with low levels of political attentiveness, ceteris paribus*.

D. RESEARCH DESIGN

Study 3 considers the extent to which President Bush was able to use issue justifications, congressional appeals, and credit claiming with evidence to influence subjects' perceptions of the importance of the economy. Overall, 340 undergraduates participated in the experiments in Study 3 during period from October 7 through October 21; 67 subjects were assigned to the issue justification condition, 68 subjects were assigned to the congressional appeal condition, 67 subjects were assigned to the credit claiming condition, 69 subjects were assigned to the control group, and 69 subjects were assigned to the pure control group. Subjects' perceptions of the importance of the economy were modeled as a function of exposure to presidential rhetoric and

several control variables. The items used to construct all measures used in this study are provided in Appendix G, their descriptive statistics appear in Table H1 in Appendix H.

1. Dependent Variable

The dependent variable in all analyses performed in Study 3 is the perceived importance of the economy. This variable was measured using a single question posed to all subjects who participated in the experiment: "How important do you think it is for the federal government to take action to address the economy?" This item was coded on a scale from zero, which means "not at all important," to six, which means "extremely important." To disguise the purpose of the question, and its relationship to the video to which subjects were previously exposed, the economic importance item was interspersed among nine other items that asked subjects to rate how important they thought it was that the government take action to address a range of issues, including the environment, AIDS/HIV, and welfare reform, to name only a few.

2. Independent Variables

To estimate the influence resulting from exposure to presidential rhetoric, a dummy variable was created for each condition, except for the *control group*. With the control group as the excluded reference category, each dummy variable measures the influence of a given form of presidential rhetoric on perceived economic importance, compared to the influence of the control group on perceived economic importance. For example, in constructing the dummy variable for *issue justification*, subjects assigned to the issue justification condition were assigned a "one," and subjects assigned to the control group were assigned a "zero." While the issue justification video contains the President Bush's economic rhetoric *plus* his justification of the importance of the economy, the control video contains Bush's economic rhetoric *plus* his discussion of the role of the federal government in managing the economy.

First, the dummy variable for *issue justification* estimates the influence of exposure to the issue justification video on perceived economic importance, compared to the influence of exposure to the control video on perceived economic importance. Second, the dummy variable for *congressional appeal* estimates the influence of exposure to the congressional appeal video on perceived economic importance, compared to the influence of exposure to the control video on perceived economic importance. Third, the dummy variable for *credit claiming with evidence* estimates the influence of exposure to the credit claiming with evidence video on perceived economic importance, compared to the influence of exposure to the control video on perceived economic importance. Finally, the dummy variable for the *pure control group* estimates the difference between the perceived importance of the economy expressed by subjects who were not exposed to a video, compared to the perceived importance of the economy expressed by subjects who were exposed to the control video.

3. Moderator Variables

As the preceding discussion of proposed hypotheses makes clear, a number of factors are expected to moderate the relationship between presidential rhetoric and perceptions of the importance of the economy. *Presidential support* represents the first class of moderators hypothesized to influence the relationship between presidential rhetoric and perceptions of the economy. First, *personal characteristics* are measured as an additive scale of five items that asked subjects to rate how well certain trait descriptions represent President Bush. Subjects were asked to rate President Bush's integrity, compassion, intelligence, vision, and charisma.[42] Subjects who believed a particular trait description described President Bush "extremely well" were coded as a "six," and subjects who believed that trait description described President Bush

[42] Prior research has shown these particular traits to be important determinants of candidate preferences in the 2000 presidential primaries (Barker and Lawrence 2002, Barker and Lawrence, forthcoming).

"not at all" were assigned a "zero." The responses offered by subjects to the five trait descriptions were combined to form a single scale representing subjects' perceptions of the President Bush's personal characteristics. The result was a 31-point scale on which a zero represents the most unfavorable rating of President Bush' personal characteristics, while a score of 30 indicates the most favorable evaluation of President Bush's personal characteristics. Second, *presidential approval* was measured with the oft-used question, "Do you approve or disapprove of the president's performance in office?" Subjects who expressed strong approval of the president were coded as "six," while subjects who voiced strong disapproval of the president's performance were assigned a "zero."

The next two variables measure respondents' *political predispositions*. The *partisan identification* of subjects was measured by coding strong Republican subjects as a "six," and strong Democratic subjects as a "zero." Similarly, in measuring the ideological orientations of subjects, strong conservative subjects were coded as a "six," and strong liberal subjects were assigned a "zero."

The final two variables operationalize subjects' *political sophistication*. The *ability* of subjects to engage in the systematic processing of political information was the measured using the 5-item scale of political knowledge recommended by Delli Carpini and Keeter (1996). The items measure subjects' knowledge of (1) which party controls the House of Representatives, (2) which of the two major parties is more conservative, (3) What job or political office is held by Dick Cheney, (4) how much of a majority in the House of Representatives is required to override a presidential veto, and (5) whose responsibility is it to determine if a law is constitutional or not: the president, the Congress, or the Supreme Court? Correct responses were coded as a "one," and incorrect answers were assigned a "zero." The result was a six-point scale of political knowledge

on which a five represents the maximum possible knowledge score, and zero the minimum possible knowledge score.

The *motivation* of subjects to engage in systematic processing was measured using an additive scale of political attentiveness composed of six items. The first measures subjects' interest in politics (0=not at all interested, 3=very interested), the second measures the extent to which subjects discuss politics with friends and family (0=never, 3=very often), and the remaining four measure the number of days during a typical week the subject (1) reads about politics in the newspaper, (2) watches national network news, (3) watches a 24-hour news channel, and (4) listens to shows about politics on the radio. The result was a 41-point scale of political attentiveness on which 40 represents the maximum possible attentiveness score, and zero represents the minimum possible attentiveness score.

4. Control Variables

To account for alternative influences on the perceived importance of the economy, this study employs several control variables. The use of the following control variables serves to purify the measures of presidential rhetoric as determinants of perceived economic importance. First among the control variables is the *prior public agenda*. Before subjects viewed a video, they were asked what they perceived to be the single most important problem or issue facing America today. Subjects who indicated the economy, or an issue closely related to the economy,[43] was most important, were assigned a "one," all other responses were coded as a "zero."

It is also possible that a subject's perception of the importance of the economy was a function of that subjects' economic standing in society. To account for this possibility, this study

[43] Reponses indicating unemployment, job security, poverty, and economic inequality were most important were all coded as 1.

included a measure of subjects' *income*. Because it makes little sense to ask undergraduate students a question about their own level of income, a question that asked subjects to report their parents' combined household income was used instead. Subjects with high incomes (above $100,000) were assigned a "five," while those with low incomes ($20,000) were coded as a "zero." While not a direct measure of the student's socioeconomic status, this question does measure the economic status of the family in which the subject was raised. In general, subjects raised in families with high incomes are expected to be more insulated from modest fluctuations in economic performance than subjects from families with lower incomes, and are therefore less likely to believe it is necessary for the government to take action to address the economy.

Finally, this study controls for the influence of subjects' *policy preferences* on economic issues. In particular, this study measures the influence of preferences on tax cuts, the extension of unemployment benefits, and job training assistance. Concerning *tax cuts*, subjects who believed a 15% tax cut should be given *only* to low-income families were coded as "one," and subjects who believed a 15% tax cut should be given *all* income groups equally were assigned a "zero." In general, those who believed the tax break should be reserved exclusively for those with low incomes are expected to believe it is more important for the government to address the economy than subjects who favored spreading the tax break equally among all income groups. Second, subjects who favored increases in *unemployment* benefits for those recently laid off from their jobs are expected to believe it is more important for the economy to be addressed than subjects who favored decreases in the benefits for those recently laid off. Subjects who said unemployment benefits should be greatly increased were coded as a "four," subjects who indicated that unemployment benefits should be greatly decreased were assigned a "zero." Finally, subjects were asked to express their opinions toward a *job assistance* program in which

unemployed workers would be given $3,000 to use for job training, child care, moving costs, and other costs associated with finding a new job. Subjects who voiced strong support for the job assistance program were assigned a "four," and subjects who expressed strong opposition were assigned a "zero." Subjects who strongly supported the job assistance program are expected to believe it is more important to address the economy than subjects who expressed strong opposition to the job assistance program.

E. METHODOLOGY

The influence of exposure to presidential rhetoric was estimated using Ordinary Least Squares regression analysis (OLS). While Analysis of Variance (ANOVA) also represents an appropriate estimation strategy for the research design outlined here, OLS was deemed preferable for a number of reasons. First, unlike ANOVA, OLS regression allows the researcher to estimate the influence of presidential rhetoric, while also controlling for the effect of alternative influences on the dependent variable. Second, OLS regression yields a summary statistic that reports the proportion of the variance in the dependent variable explained by all the independent variables in the model, a useful measure of the degree to which the overall model fits the data. Finally, the results OLS regression analyses yield coefficients that are of substantially greater informational value than those produced by ANOVA. While the coefficients of ANOVA simply report mean differences, partial regression coefficients interpret the effect on the dependent variable produced by a one-unit increase in an independent variable, holding all other variables constant.

For example, in the analysis of Hypothesis 1, the coefficient for *issue justification* estimates the difference in perceived economic importance among subjects exposed to the issue

justification video compared to the perceived importance of the economy among subjects exposed to the control video, holding all other variables constant (Hardy 2003). Hypotheses 3 through 8 test the influence of individual moderators of the relationship between exposure to presidential rhetoric and the perceived importance of the economy. For instance, Hypothesis 2 investigates the effect of *presidential approval* on the relationship between presidential rhetoric and perceptions of economic importance. To estimate the moderating effect of presidential approval, a set of interaction terms were created, one for each form of presidential rhetoric. For example, the interaction term for *issue justification* was created by multiplying the issue justification variable by the approval variable. Interpreted, this variable reflects the influence of a one-unit increase in presidential approval on the difference between the effect of exposure to the issue justification video on perceived economic importance, compared to the effect of exposure to the control video on perceived economic importance (Jaccard and Turrisi 2003).

The coefficient of the *uninteracted* issue justification variable represents the effect of exposure to this form of presidential rhetoric among subjects who strongly disapproved of the president's performance, that is, when the value of the presidential approval variable equals zero (Jaccard and Turrisi 2003). The effect of the *uninteracted* presidential approval variable represents the influence of presidential approval on perceptions of economic importance expressed by subjects exposed to the control video, in other words, when the value of the issue justification variable is equal to zero. Having outlined the methodological procedures used to estimate the influence of presidential rhetoric, as well as the substantive interpretations of the partial regression coefficients, we turn to a discussion of the empirical results.

Finally, an incremental F-Test was performed on each of the models in which the influence of a moderator was estimated. This procedure provided a basis for comparing the

variance in economic perceptions explained by a "Constrained Model," which did not include the interaction terms, with the variance in economic perceptions explained by an "Unconstrained Model," which did included the interaction terms. By calculating whether the F-statistic computed for the Unconstrained Model is significantly greater than the F-statistic computed for the Constrained Model, the incremental F-Test determined whether the interaction terms explained a significant proportion of variance *over and above* the variance explained by a model which did not contained the interaction terms.

F. RESULTS

1. Presidential Rhetoric

The results of the OLS regression analysis of Hypothesis 1 are summarized in Table 16. They demonstrate, first of all, that the independent variables in model collectively account for almost 31% of the variance in subjects' perceptions of economic importance. The results also clearly establish the importance of President Bush' rhetoric as a determinant of subjects' perceptions of the economy. Subjects in the issue justification and congressional appeal conditions believed it was more important for the government to take action to address the economy than subjects in the control group. In other words, subjects exposed to President Bush's economic rhetoric *plus* his issue justification or congressional appeal believed it was more important to address the economy than subjects exposed to the president's economic rhetoric *plus* his discussion of the role of the federal government in managing the economy. In more precise terms, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .800 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. To calculate the average perceived importance

of the economy expressed by subjects in the issue justification condition, the average perceived importance of the economy expressed by subjects in the control group, represented by the value of the constant, was added to the coefficient for issue justification, which indicates how much *greater* the influence of the issue justification video was compared to the influence of the control video. The average perceived importance of the economy among subjects in the control group is 4.153 on the seven-point scale of economic importance. If the influence of issue justification is .800 units *greater* than that of the control group, then the average importance of the economy perceived by subjects in the issue justification video is 4.953 on the seven-point scale of economic importance.

TABLE 16. The Influence of Presidential Rhetoric on the Perceived Importance of the Economy

Independent Variable	b	Se	t
Presidential Rhetoric			
Issue justification	.800	.188	4.27***
Congressional appeal	.396	.187	2.10*
Credit claiming w/ evidence	-.604	.188	-3.22**
Pure control group	-.513	.187	-2.73**
Control Variables			
Prior agenda	.012	.147	0.01
Tax cuts	.044	.130	0.37
Unemployment benefits	.167	.089	1.89
Job assistance	.037	.056	0.65
Income	-.041	.039	-1.07
N	340		
R^2	.306		
Adjusted R^2	.279		
Constant	4.153	.131	21.68***

Note: OLS regression results with unstandardized coefficients. The dependent variable is the perceived importance of the economy (0=not at all important; 6=extremely important).
*p <.05; **p <.01; ***p <.001. Two-tailed.

In addition, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .396 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Again, the average importance of the economy perceived by subjects in the control group is 4.153 on the seven-point scale of economic importance. Thus, the average importance of the economy perceived by subjects in the congressional appeal condition is 4.549. After hearing President Bush discuss evidence of economic decline, subjects were more convinced that the economy should be addressed if that discussion was followed up by an issue justification or a congressional appeal, than if President Bush followed by simply discussing the role of the federal government in managing the economy.

The results also suggest, in support of Hypothesis 2, that President Bush's rhetoric was successful in convincing subjects that some progress had already been made in addressing deteriorating economic conditions. By citing evidence of progress made in dealing with the economy, President Bush was able to reduce subjects' concerns about the economy. Subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .604 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Subjects who listened to Bush discuss symptoms of economic decline, followed by evidence of success in addressing the economy believed it was less urgent to address the economy than subjects who listened to Bush discuss symptoms of economic decline, followed by a discussion of the federal government's role in addressing the economy. While the average importance of the economy perceived by subjects in the control group is 4.153 on the seven-point scale of economic importance, the average importance of the economy perceived by subjects in the credit claiming with evidence condition is 3.549.

Perhaps more impressively, the importance of the economy perceived by subjects in the credit claiming with evidence condition was actually *lower* than the perceived importance of the economy among subjects in the *pure control group*. That is, the importance of the economy perceived by subjects who watched President Bush point to signs of economic decline, and then follow up by citing evidence of economic progress, was *lower* than the importance of the economy perceived by subjects who were exposed to no presidential rhetoric at all. A comparison of the coefficients for the credit claiming with evidence variable and the pure control group variable illustrates the point. As indicated above, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .604 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. However, subjects in the *pure control group* are expected to rate the importance of the economy an average of .513 units lower on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. While the difference between these two coefficients proved statistically nonsignificant,[44] the fact that subjects in the credit claiming condition believed the economy was less important than subjects in the pure control group is remarkable.

Thought not of primary interest, the difference between the importance of the economy perceived by subjects in the *control group* and the importance of the economy perceived by subjects in the *pure control group* is also subject to meaningful interpretation. It will be recalled that subjects in the pure control group were not shown a video, while subjects in the control group were shown a video in which Bush recounted evidence of economic decline and then

[44] A Wald test was performed to determine whether the coefficient of the pure control group variable was significantly different from the coefficient of the credit claiming with evidence variable. The results of this test yielded an F-statistic of .23, where Prob > F = .628. Thus, the equality hypothesis that the coefficients of the pure control and credit claiming with evidence variables are equal cannot be rejected.

discussed the role of government in managing the economy. As such, the pure control group variable serves as a measure of the perceived importance of the economy among those exposed to Bush's economic rhetoric, compared to the importance of the economy perceived by subjects where not exposed to the president's rhetoric. As expected, the level of importance attributed to the economy by subjects in the pure control group was significantly less than the importance of the economy perceived by subjects in the control group. On average, the perceived importance of the economy among subjects in the *pure control group* is expected to be .513 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Subjects were more likely to believe the government should take action to address the economy if they heard President Bush discuss evidence of economic decline, than if they did not hear Bush cite such evidence.

The OLS results shown in Table 16 also account for several alternative influences on perceived economic importance. Of the five control variables, only one achieved some degree of influence. Subjects who believed the amount of unemployment benefits received by people recently laid off from their jobs should be greatly increased were more likely to believe the economy should be addressed than subjects who believed unemployment benefits should be greatly decreased, but only marginally so ($p < .10$). Subjects are expected to rate the importance of the economy an average of .167 units higher for each one-unit increase on the four-point scale of unemployment benefits. Stated differently, subjects who believed unemployment benefits should be greatly *increased* rated the importance of the economy an average of .501 units higher than subjects who believed unemployment benefits should be greatly *decreased*, ceteris paribus.

2. Presidential Support

According to Hypotheses 3 and 4, subjects who supported President Bush are expected to be more receptive to his rhetoric in their evaluations of economic importance than subjects who did not support President Bush. As Hypothesis 3 predicts, the influence of presidential rhetoric on perceived economic importance is expected to be greater among subjects who expressed favorable evaluations of President Bush's personal characteristics than among subjects who expressed unfavorable evaluations of President Bush's characteristics.

The results of OLS regression analysis of Hypothesis 3 are shown in Table 17. Collectively, the independent variables account for about 35% of the variance in subjects' perceptions of the importance of the economy. The interaction terms in this model demonstrate the effect of a one-unit increase on the scale of personal characteristics on the influence of a given form of presidential rhetoric on perceived economic importance (Jaccard and Turrisi 2003). For each 1 unit increase on the 31-point scale of personal characteristics, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .030 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. As an alternative strategy for interpreting the effect of personal characteristics, the following estimates the effect of a full range shift in the personal characteristics scale on the relationship between issue justification and perceived importance.[45] For a maximum increase of 30 on the 31-point scale of personal characteristics, subjects in the *issue justification* condition are expected to rate the economy an average of .900 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

[45] The effect of a full range shift in the moderator variable on the influence of a presidential rhetoric variable on perceived economic importance was calculated by multiplying the coefficient for the interaction term by the full range of the moderator variable. In the present case, the coefficient for the interaction term composed of *issue justification* and *personal characteristics* (.030) was multiplied by the full range of the *personal characteristics* variable (30), yielding a product of .900.

TABLE 17. The Influence of Personal Characteristics on the Relationship Between Presidential Rhetoric and the Perceived Importance of the Economy

Independent Variable	b	Se	t
Presidential Rhetoric			
Issue justification	.407	.194	2.09*
Congressional appeal	.127	.344	0.37
Credit claiming w/ evidence	-.581	.182	-3.20**
Pure control group	-.912	.228	-4.00***
Personal Characteristics	.026	.011	0.24
Interactions			
Personal characteristics x Issue justification	.030	.008	3.35**
Personal characteristics x Congressional appeal	.034	.017	1.97*
Personal characteristics x Credit claiming w/ evidence	-.033	.011	-2.94**
Personal characteristics x Pure control group	.016	.012	1.37
Control Variables			
Prior agenda	.078	.142	0.55
Tax cuts	.052	.125	0.42
Unemployment benefits	.039	.084	0.46
Job assistance	.046	.054	0.86
Income	-.041	.037	-1.11
N	340		
R^2	.351		
Adjusted R^2	.324		
Constant	5.507	.251	21.93***

Note: OLS regression results with unstandardized coefficients. The dependent variable is the perceived importance of the economy (0=not at all important; 6=extremely important). *p <.05; **p <.01; ***p <.001. Two-tailed.

Evaluations of personal characteristics also proved to be an important moderator of the influence of *congressional appeals* on perceived economic importance. The moderating effect of personal characteristics on the influence of presidential rhetoric is also illustrated in Figures 23 through 25. For each one-unit increase on the 31-point scale of personal characteristics, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .034 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. In terms of a full range shift, for a maximum increase of 30 on the 31-point scale of personal characteristics, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of 1.020 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

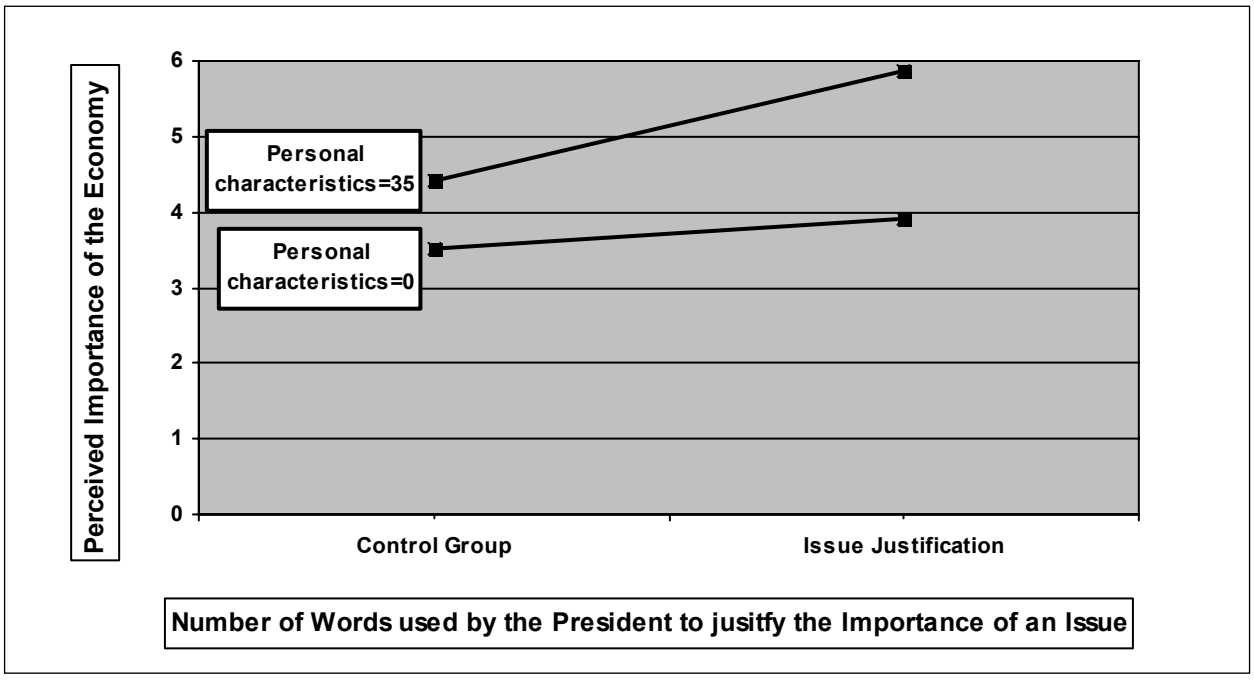

FIGURE 23. The Moderating Effect of Personal Characteristics on the Relationship Between Issue Justification and the Public Agenda

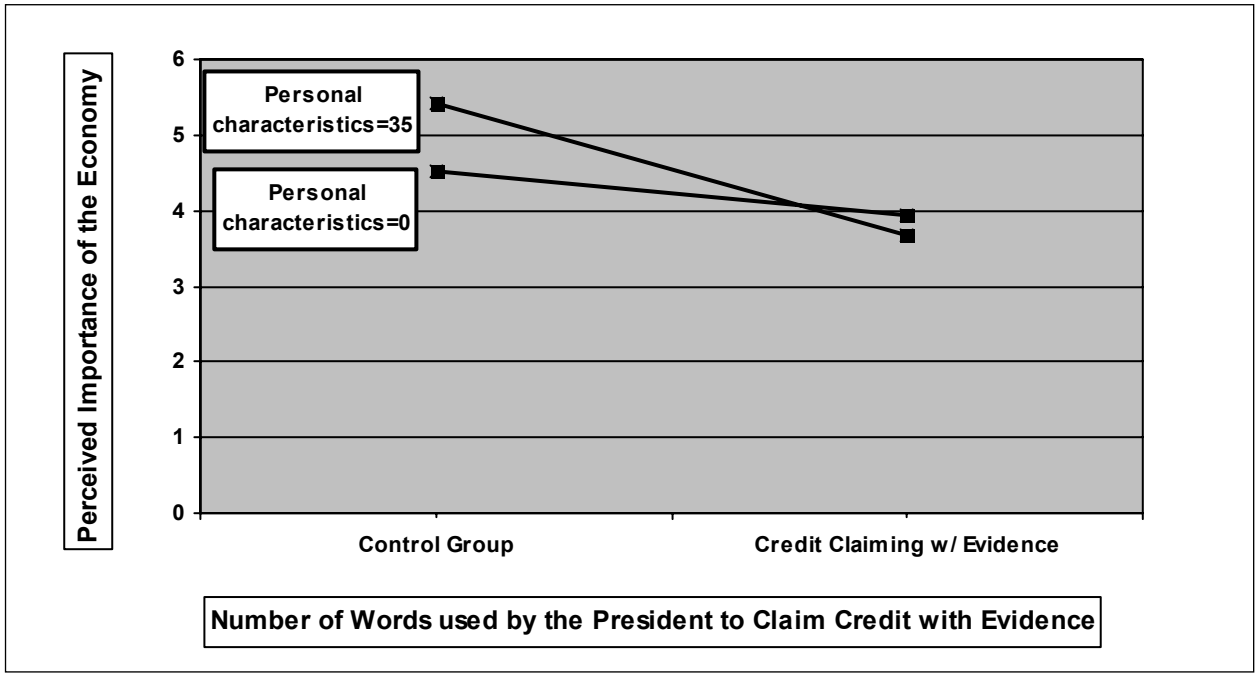

FIGURE 24. The Moderating Effect of Personal Characteristics on the Relationship Between Credit Claiming with Evidence and the Public Agenda

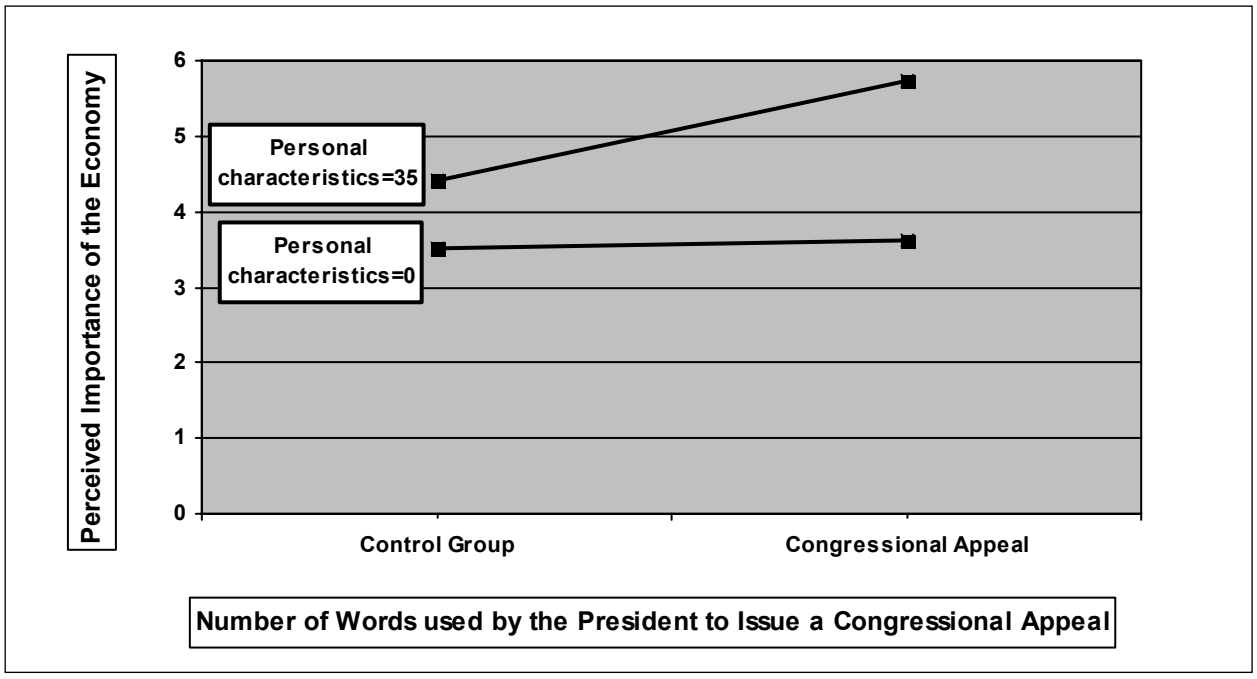

FIGURE 25. The Moderating Effect of Personal Characteristics on the Relationship Between Congressional Appeals and the Public Agenda

Subjects who expressed favorable evaluations of Bush's personal characteristics also placed greater emphasis on his credit claiming with evidence rhetoric than subjects who reported unfavorable evaluations of Bush's characteristics. For each one-unit increase on the 31-point scale of personal characteristics, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .033 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. For a maximum increase of 30 on the 31-point scale of personal characteristics, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .990 units *lower* on the seven-point scale than subjects in the *control group*, ceteris paribus.

The uninteracted presidential rhetoric variables demonstrate the effect of those forms of presidential rhetoric when the value of the personal characteristics scale is equal to zero (Jaccard and Turrisi 2003). The results indicate that issue justification and credit claiming with evidence figured prominently in the perceptions of economic importance expressed, even by subjects with the most unfavorable evaluations of President Bush's personal characteristics. Subjects in the *issue justification* condition with the most unfavorable evaluations of Bush's personal characteristics are expected to rate the economy an average of .407 units higher on the seven-point scale of economic importance than subjects in the *control group* with the most unfavorable evaluations of Bush's characteristics, ceteris paribus. Also, subjects in the *issue justification* condition with the most unfavorable evaluations of President Bush's personal characteristics are expected to rate the importance of the economy an average of .581 units higher on the seven-point scale than subjects in the *control group* with the most unfavorable evaluations of Bush's characteristics, ceteris paribus. So, while the influence of presidential rhetoric increases as the favorability of evaluations of Bush personal characteristics increases, the results also suggest that

even subjects who reported *unfavorable* evaluations of Bush's personal characteristics relied on his rhetoric in evaluating the importance of the economy.

The uninteracted personal characteristics variable demonstrates the effect of this variable when all other variables in the model are equal to zero. Thus, this variable estimates the influence of personal characteristics on the perceptions of economic importance expressed by subjects in the control group. As the coefficient for this variable reveals, subjects in the control group who expressed favorable evaluations of President Bush's personal characteristics were no more likely to believe the economy should be addressed than subjects in the control group who expressed unfavorable evaluations of Bush's personal characteristics. Finally, the results of the incremental F-test in Table 18 reveal the significant proportion of variance explained by the interaction terms (represented by the Unconstrained Model) *over and above* the variance explained by the model that does not contain the interaction terms (represented by the Constrained Model). More specifically, The F-statistic computed for the Unconstrained Model of 22.370 is significantly greater than the F-statistic computed for the Constrained Model of 15.430. Thus, variance explained by the model containing the interactions between the presidential rhetoric variables and the personal characteristics measure (.351) was significantly greater than the variance explained by the model that did not contain these interactions (.296).

TABLE 18. Incremental F-Test of Constrained and Unconstrained Personal Characteristics Models

Model	R^2	F	Sig. (Change in F)
Constrained model (without interactions)	.296	15.430	
Unconstrained model (with interactions)	.351	22.370	.000

Note: Incremental F-Test determines whether the increase in variance explained by the Unconstrained Personal Characteristics Model over and above the variance explained by the Constrained Personal Characteristics Model is statistically significant.

Hypothesis 4 examines the moderating influence of presidential approval on the relationship between presidential rhetoric and perceptions of the importance of the economy. The results in Table 18 demonstrate that the variables in the model account for approximately 39% of the variance in subjects' evaluations of economic importance. Subjects who approved of President Bush's performance in office placed greater emphasis on his issue justification, congressional appeal, and credit claiming with evidence than subjects who disapproved of his performance. The moderating effects of approval on each of the forms of presidential rhetoric are illustrated in Figures 26 through 28. For each one-unit increase on the seven-point scale of presidential approval, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .208 units higher on the 7-point scale of economic importance than subjects in the *control group*, ceteris paribus. Thus, for a maximum increase of six on the seven-point scale of presidential approval, subjects in the *issue justification* condition are expected to rate the economy an average of 1.248 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Subjects who approved of President Bush were also more receptive to his congressional appeal than subjects who disapproved of President Bush. For each one-unit increase on the seven-point scale of presidential approval, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .147 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. In other words, for a maximum increase of six on the seven-point scale of presidential approval, subjects in the *issue justification* condition are expected to rate the economy an average of .882 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

TABLE 19. The Influence of Presidential Approval on the Relationship Between Presidential Rhetoric and the Perceived Importance of the Economy

Independent Variable	b	Se	t
Presidential Rhetoric			
Issue justification	.128	.265	0.48
Congressional appeal	.200	.076	2.62**
Credit claiming w/ evidence	-.719	.202	-3.56***
Pure control group	-.805	.402	-2.00*
Presidential approval	.021	.047	0.44
Interactions			
Presidential approval x Issue justification	.208	.054	3.86***
Presidential approval x Congressional appeal	.147	.031	4.73***
Presidential approval x Credit claiming w/ evidence	-.154	.051	3.04**
Presidential approval x Pure control group	.080	.088	0.90
Control Variables			
Prior agenda	.096	.140	0.68
Tax cuts	.040	.127	0.31
Unemployment benefits	.023	.083	0.03
Job assistance	.020	.053	0.38
Income	-.033	.036	-0.90
N	340		
R^2	.391		
Adjusted R^2	.372		
Constant	4.471	.247	18.12***

Note: OLS regression results with unstandardized coefficients. The dependent variable is the perceived importance of the economy (0=not at all important; 6=extremely important). *p <.05; **p <.01; ***p <.001. Two-tailed.

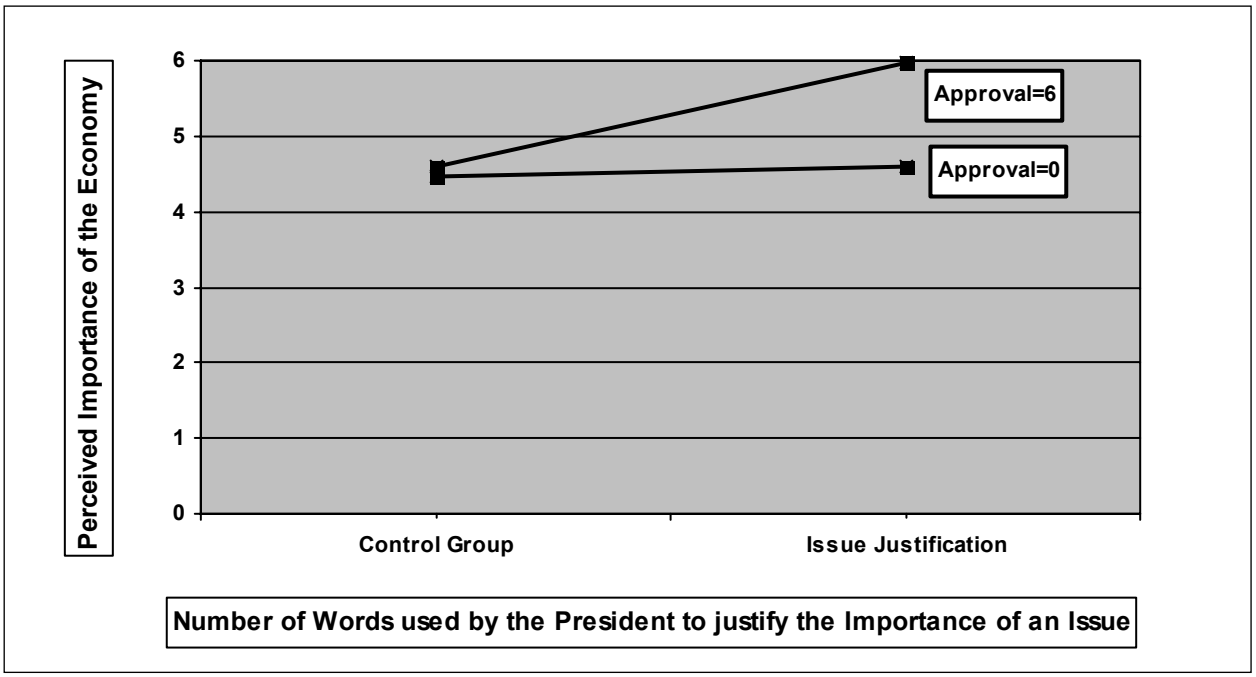

FIGURE 26. The Moderating Effect of Presidential Approval on the Relationship Between Issue Justification and the Public Agenda

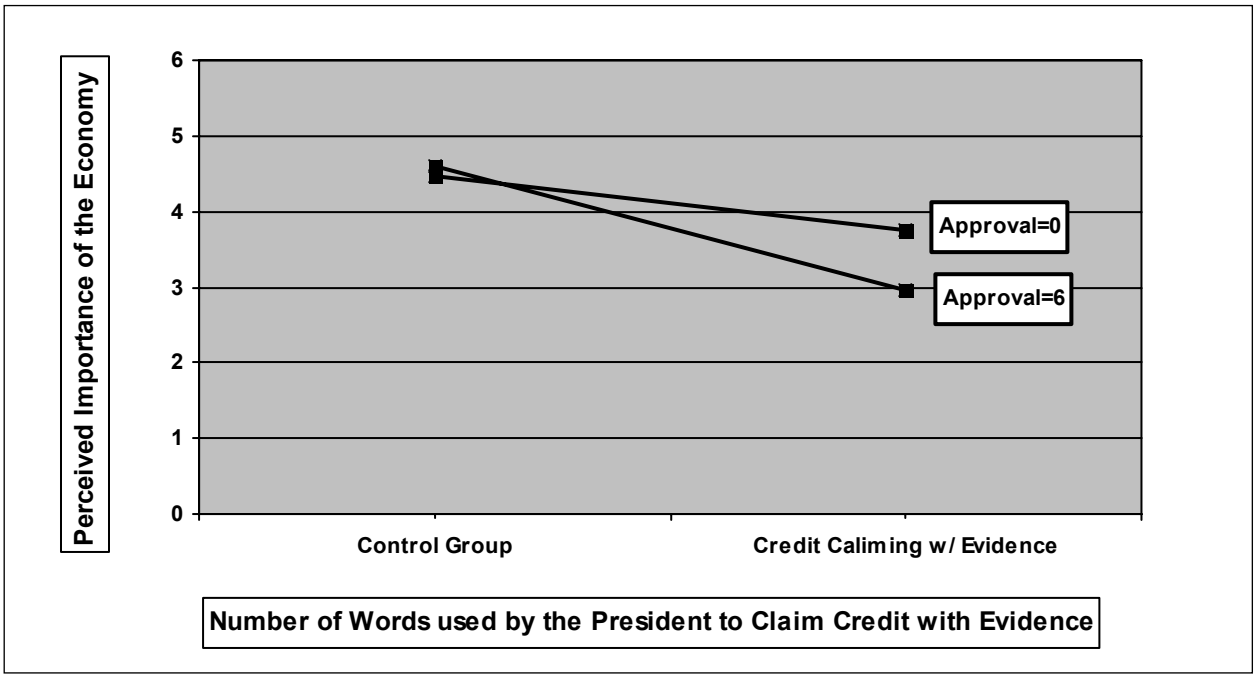

FIGURE 27. The Moderating Effect of Presidential Approval on the Relationship Between Credit Claiming with Evidence and the Public Agenda

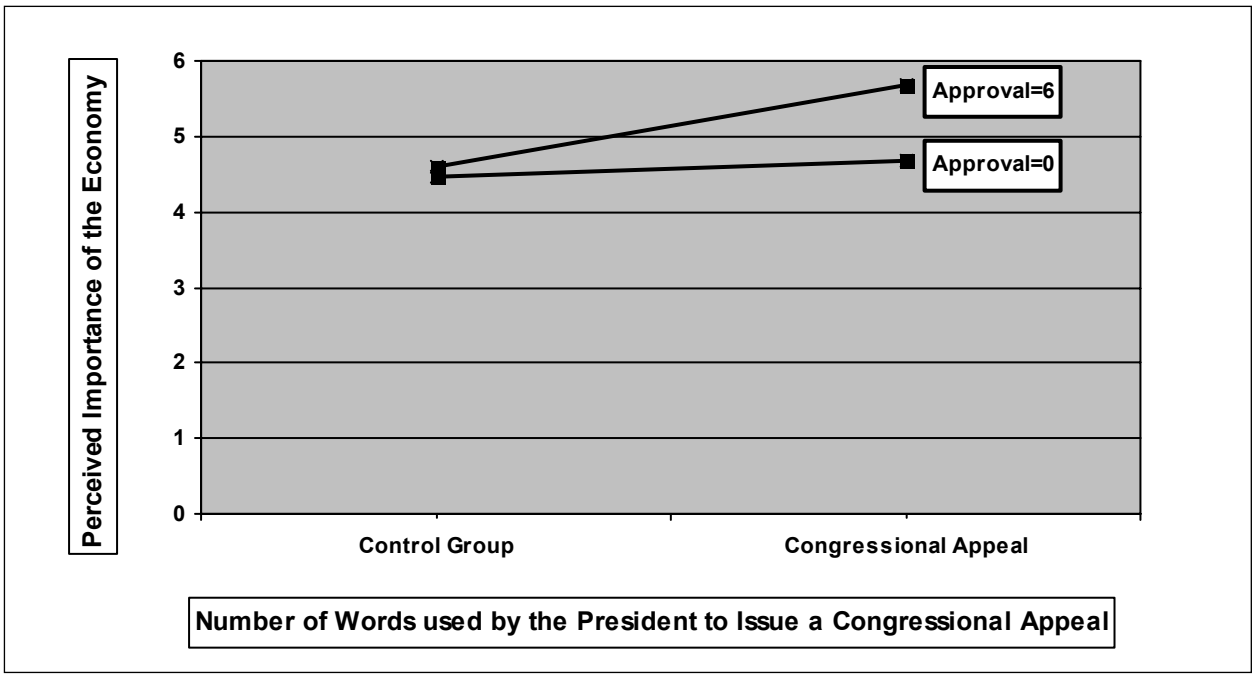

FIGURE 28. The Moderating Effect of Presidential Approval on the Relationship Between Congressional Appeals and the Public Agenda

Credit claiming also proved more influential among subjects who approved of President Bush than among subjects who did not so approve. For each one-unit increase on the seven-point scale of presidential approval, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .154 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Stated differently, for a maximum increase of six on the seven-point scale of presidential approval, subjects in the *credit claiming with evidence* condition are expected to rate the economy an average of .924 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

The uninteracted presidential rhetoric variables in Table 18 estimate the effect of presidential rhetoric when the value of the presidential approval variable is equal to zero. For example, the uninteracted congressional appeal variable demonstrates the influence of issue

justification among subjects who strongly disapproved of President Bush's performance. Subjects in the *congressional appeal* condition who strongly disapproved of President Bush's performance are expected to rate the importance of the economy an average of .200 units higher on the seven-point scale of economic importance than subjects in the *control group* who strongly disapproved of the Bush's performance, ceteris paribus. Moreover, subjects in the *credit claiming with evidence* condition who strongly disapproved of Bush's performance are expected to rate the importance of the economy an average of .719 units *lower* on the seven-point scale of economic importance than subjects in the *control group* who strongly disapproved of Bush's performance, ceteris paribus. Thus, while presidential rhetoric is certainly more influential in the perceptions of economic importance expressed by subjects who approved of President Bush's performance, the findings reported here illustrate the influence of presidential rhetoric, even among subjects who expressed the most negative evaluations of President Bush's performance.

The uninteracted presidential approval reveals that subjects in the control group who approved of the Bush's performance were no more likely to believe that the government should take action to address the economy than subjects in the control group who disapproved of Bush's performance. Finally, an examination of the results of the incremental F-Test in Table 20 reveals the added explanatory power of the interaction terms in the Approval Model. The proportion of variance explained by the model that included the interaction terms (.391) is significantly greater than that explained by the model which did not include these interactions (.280). The F-statistic of 29.083 computed for the Unconstrained Model is significantly greater than the F-statistic of 14.304 computed for the Constrained Model.

TABLE 20. Incremental F-Test of Constrained and Unconstrained Presidential Approval Models

Model	R^2	F	Sig. (Change in F)
Constrained model (without interactions)	.280	14.304	
Unconstrained model (with interactions)	.391	29.083	.000

Note: Incremental F-Test determines whether the increase in variance explained by the Unconstrained Approval Model over and above the variance explained by the Constrained Approval Model is statistically significant.

3. Political Predispositions

Hypotheses 5 and 6 investigate the extent to which political predisposition influence the relationship between presidential rhetoric and perceptions of the importance of the economy. Hypothesis 5, in particular, predicts that presidential rhetoric will be more influential in the perceptions of economic importance expressed by Strong Republican subjects than by Strong Democratic subjects. The results reported in Table 19 generally support this expectation. Overall the variables in the model account for almost 43% of the variance in perceptions of economic importance. The interaction terms in the model further indicate that subjects' partisan identification serves as a significant moderator of the influence of all three forms of presidential rhetoric. The moderating effects of party identification on are shown in Figures 29 through 31.

For each one-unit increase on the seven-point scale of partisan identification, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .191 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Interpreted differently, for a maximum increase of six on the seven-point scale of partisan identification, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of 1.146 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

TABLE 21. The Influence of Partisan Identification on the Relationship Between Presidential Rhetoric and the Perceived Importance of the Economy

Independent Variable	b	Se	t
Presidential Rhetoric			
Issue justification	.402	.199	2.02*
Congressional appeal	.299	.078	3.83***
Credit claiming w/ evidence	-.494	.194	-2.55*
Pure control group	-.759	.303	-2.51*
Partisan Identification	.017	.030	0.57
Interactions			
Partisan identification x Issue justification	.168	.040	4.24***
Partisan identification x Congressional appeal	.191	.033	5.88***
Partisan identification x Credit claiming w/ evidence	-.148	.054	-2.76**
Partisan identification x Pure control group	.063	.071	0.89
Control Variables			
Prior agenda	.250	.134	1.87
Tax cuts	.012	.118	0.10
Unemployment benefits	-.031	.079	-0.04
Job assistance	.069	.050	1.37
Income	-.095	.034	-2.78**
N	340		
R^2	.426		
Adjusted R^2	.401		
Constant	5.009	.213	23.46***

Note: OLS regression results with unstandardized coefficients. The dependent variable is the perceived importance of the economy (0=not at all important; 6=extremely important). *p <.05; **p <.01; ***p <.001. Two-tailed.

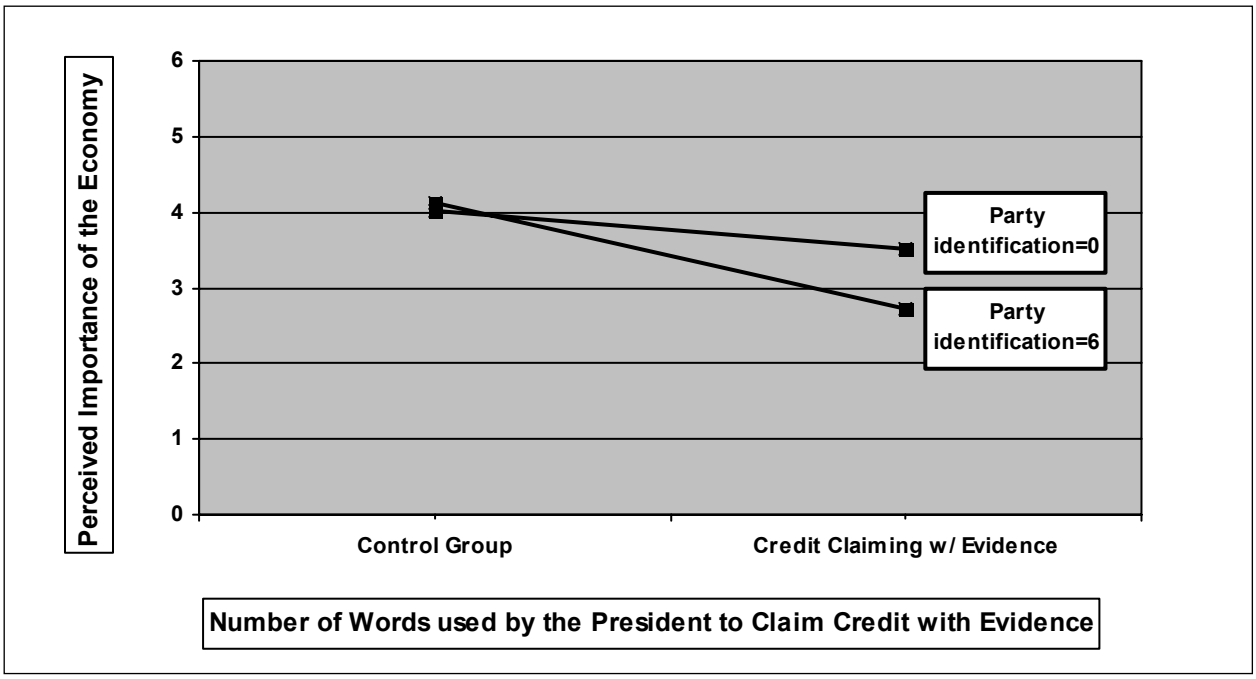

FIGURE 29. The Moderating Effect of Party Identification on the Relationship Between Issue Justification and the Public Agenda

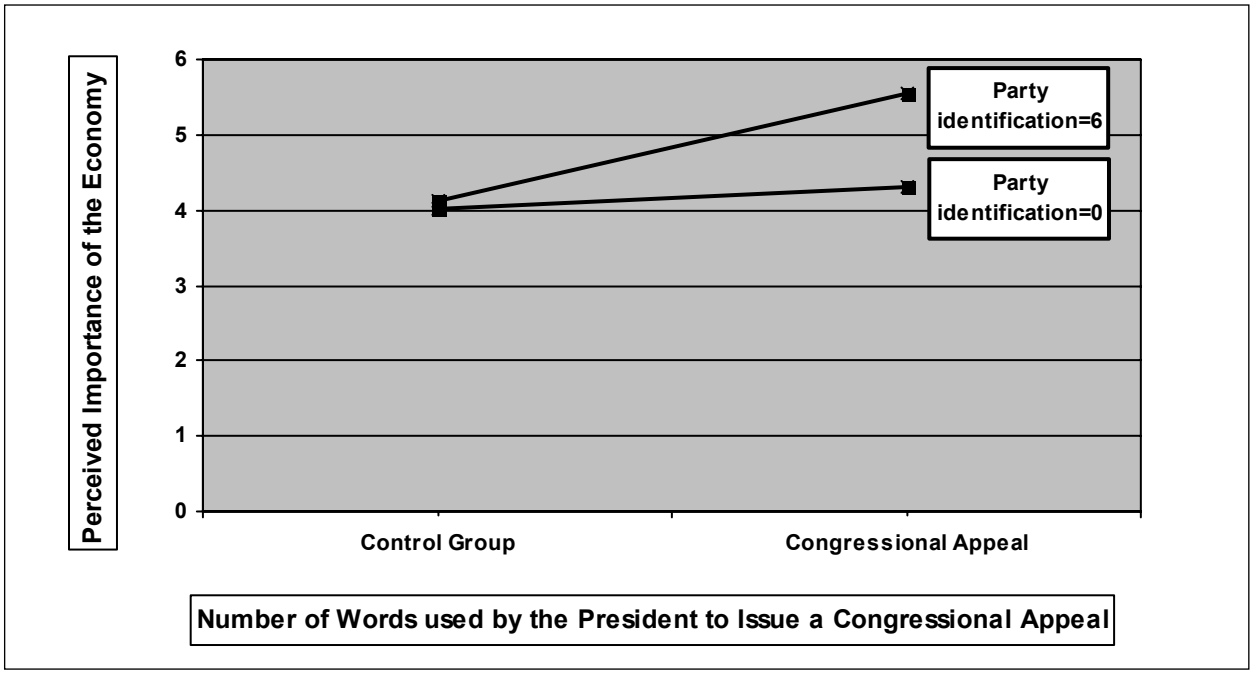

FIGURE 30. The Moderating Effect of Party Identification on the Relationship Between Credit Claiming with Evidence and the Public Agenda

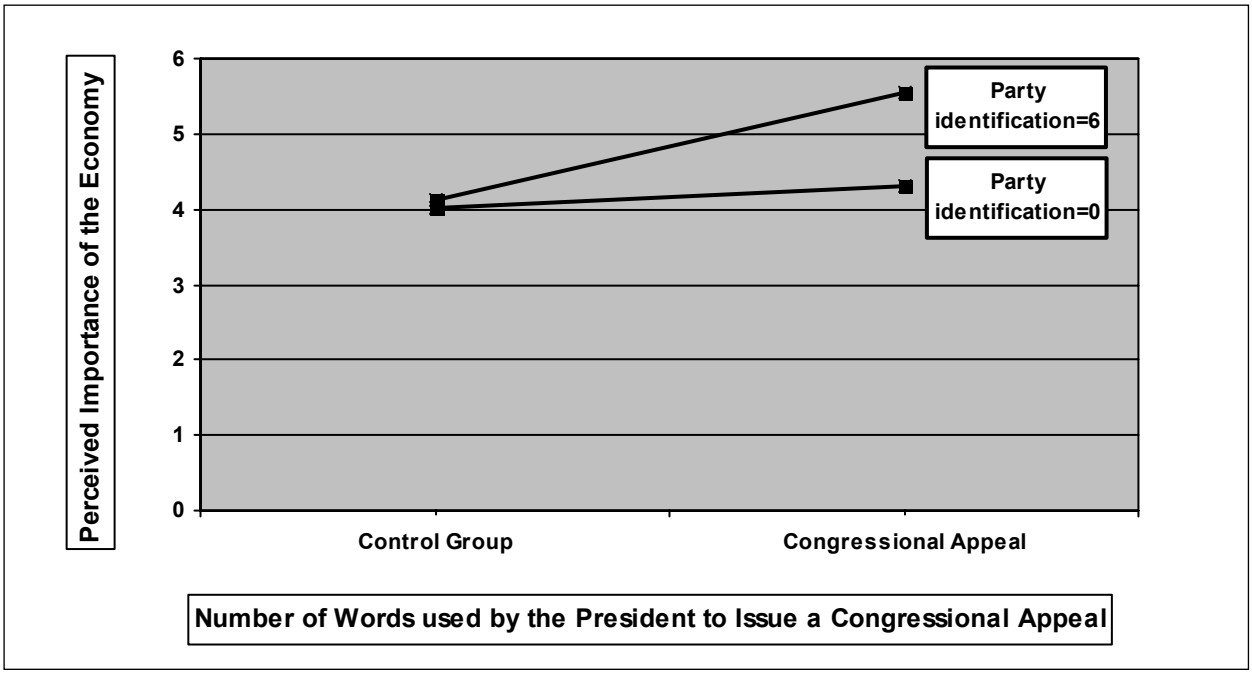

FIGURE 31. The Moderating Effect of Party Identification on the Relationship Between Congressional Appeals and the Public Agenda

President Bush's use of issue justification also proved more effective among strong Republican subjects than among strong Democratic subjects. For each one-unit increase on the seven-point scale of partisan identification, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .168 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Or, in other words, for a maximum increase of six on the seven-point scale of partisan identification, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of 1.008 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

Finally, strong Republican subjects were more receptive to President Bush's efforts to claim credit than strong Democratic subjects. For each one-unit increase on the seven-point scale of partisan identification, subjects in the *credit claiming with evidence* condition are expected to

rate the importance of the economy an average of .148 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Stated in different terms, for a maximum increase of six on the seven-point scale of partisan identification, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .888 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

The uninteracted presidential rhetoric variables illustrate the influence of presidential rhetoric among strong Democratic subjects, that is, when the value of the partisan identification variable is equal to zero. First, strong Democratic subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .402 units higher on the seven-point scale of economic importance than strong Democratic subjects in the *control group*, ceteris paribus. Similarly, strong Democrats in the *congressional appeal* condition are expected to rate the importance of the economy an average of .299 units higher on the seven-point scale of economic importance than strong Democrats in the *control group*, ceteris paribus. Last, strong Democrats in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .494 units *lower* on the seven-point scale of economic importance than strong Democrats in the *control group*, ceteris paribus.

The uninteracted partisan identification variable shows that strong Republican subjects in the control group were not significantly more likely to believe the government should take action to address the economy than strong Democratic subjects in the control group. The results of the partisan identification model also reveal income to be an important factor in perceptions of the importance of the economy. Subjects whose parents have lower levels of income are more likely to think the economy should be addressed than subjects whose parents have higher levels of

income. The perceived importance of the economy is expected to be an average of .095 units lower for each one-unit increase on the six-point scale of income, ceteris paribus. Or, interpreted as a full range shift, the perceived importance of the economy among subjects whose parents make under $20,000 a year is expected to be an average of .475 units greater on the seven-point scale of economic importance than among subjects whose parents make over $100,000 a year, ceteris paribus. Finally, the results of the F-test displayed in Table 22 demonstrate that the F-statistic computed for the Unconstrained Model is significantly greater than the F-statistic computed for the Constrained Model. As a result, the proportion of variance explained by the model contain the interaction terms (.426) is indeed significantly greater than the proportion of variance explained by the model that did not contain these interaction terms (.318).

TABLE 22. Incremental F-Test of Constrained and Unconstrained Party Identification Models

Model	R^2	F	Sig. (Change in F)
Constrained model (without interactions)	.318	17.064	
Unconstrained model (with interactions)	.426	32.364	.000

Note: Incremental F-Test determines whether the increase in variance explained by the Unconstrained Party Model over and above the variance explained by the Constrained Party Model is statistically significant.

Hypothesis 6 examines the effect of subjects' ideological orientations on the relationship between presidential rhetoric and perceptions of economic importance. It sets forth the expectation that strong conservative subjects are likely to be more receptive to President Bush's rhetoric than strong liberal subjects. The results of the Ideological Orientation Model are displayed in Table 20. They show, first of all, that the variables in the model account for about 41% of the variance in perceptions of economic importance. The results also confirm the importance of ideological orientation as a moderator of the influence of 2 of the 3 presidential

rhetoric variables. The moderating effects of ideological orientation are also shown graphically in Figures 32 and 33.

President Bush's congressional appeal and credit claiming proved more influential in the evaluations of economic importance made by strong conservative subjects than the evaluations made by strong liberal subjects. For each one-unit increase on the seven-point scale of ideological orientation, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .132 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. For a maximum increase of six on the seven-point scale of ideological orientation, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .792 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. In further evidence of the importance of ideology as a moderator, for each one-unit increase on the seven-point scale of ideological orientation, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .231 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Alternatively, for a maximum score of six on the seven-point scale of ideological orientation, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of 1.39 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

The uninteracted presidential rhetoric variables show that congressional appeal and credit claiming with evidence also weighed heavily in the perceptions of economic importance expressed by strong liberals, that is, when the value of the ideological orientation variable is equal to zero. Strong liberal subjects in the *congressional appeal* condition are expected to rate

TABLE 23. The Influence of Ideological Orientation on the Relationship Between Presidential Rhetoric and the Perceived Importance of the Economy

Independent Variable	b	Se	t
Presidential Rhetoric			
Issue justification	.352	.211	1.67
Congressional appeal	.170	.070	2.44*
Credit claiming w/ evidence	-.682	.214	-3.19**
Pure control group	-.073	.212	-0.34
Ideological Orientation	.070	.041	1.72
Interactions			
Ideological orientation x Issue justification	.091	.045	1.91
Ideological orientation x Congressional appeal	.132	.027	4.88***
Ideological orientation x Credit claiming w/ evidence	-.231	.058	-3.97***
Ideological orientation x Pure control group	-.237	.059	-4.02***
Control Variables			
Prior agenda	.153	.130	1.18
Tax cuts	.141	.115	1.23
Unemployment benefits	.012	.078	-0.15
Job assistance	.038	.049	0.77
Income	-.012	.034	0.36
N	340		
R^2	.414		
Adjusted R^2	.394		
Constant	4.751	.218	21.71***

Note: OLS regression results with unstandardized coefficients. The dependent variable is the perceived importance of the economy (0=not at all important; 6=extremely important). *p <.05; **p <.01; ***p <.001. Two-tailed.

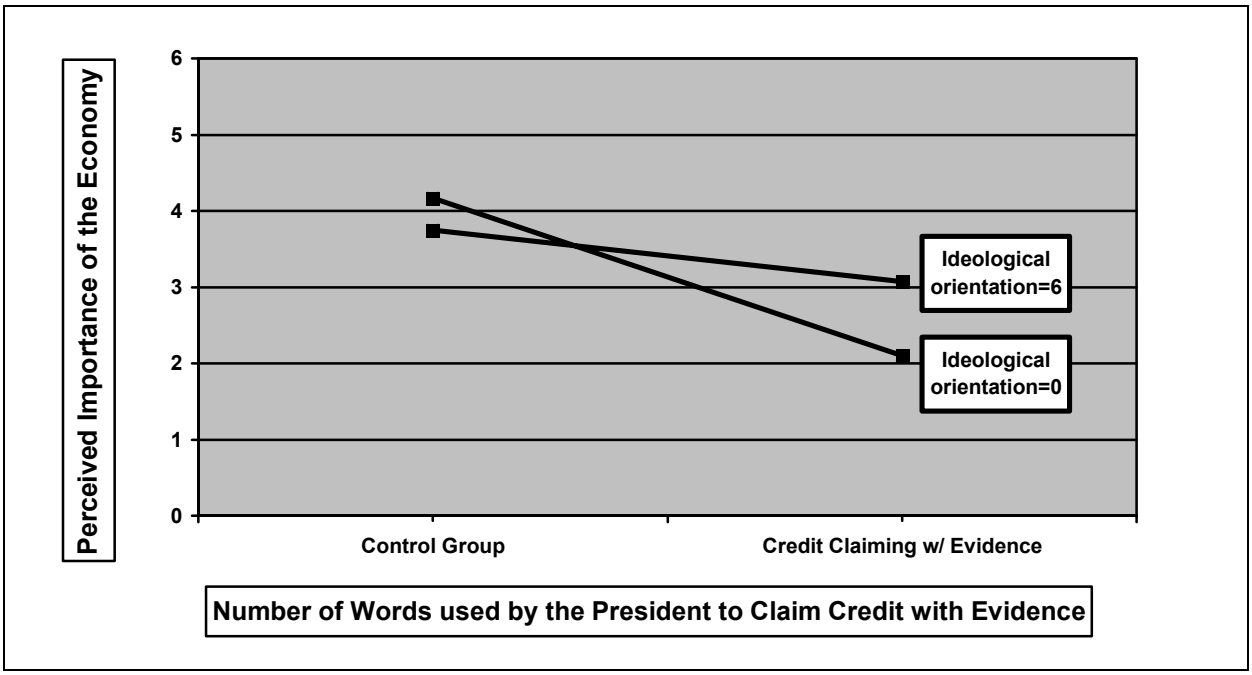

FIGURE 32. The Moderating Effect of Ideological Orientation on the Relationship Between Credit Claiming with Evidence and the Public Agenda

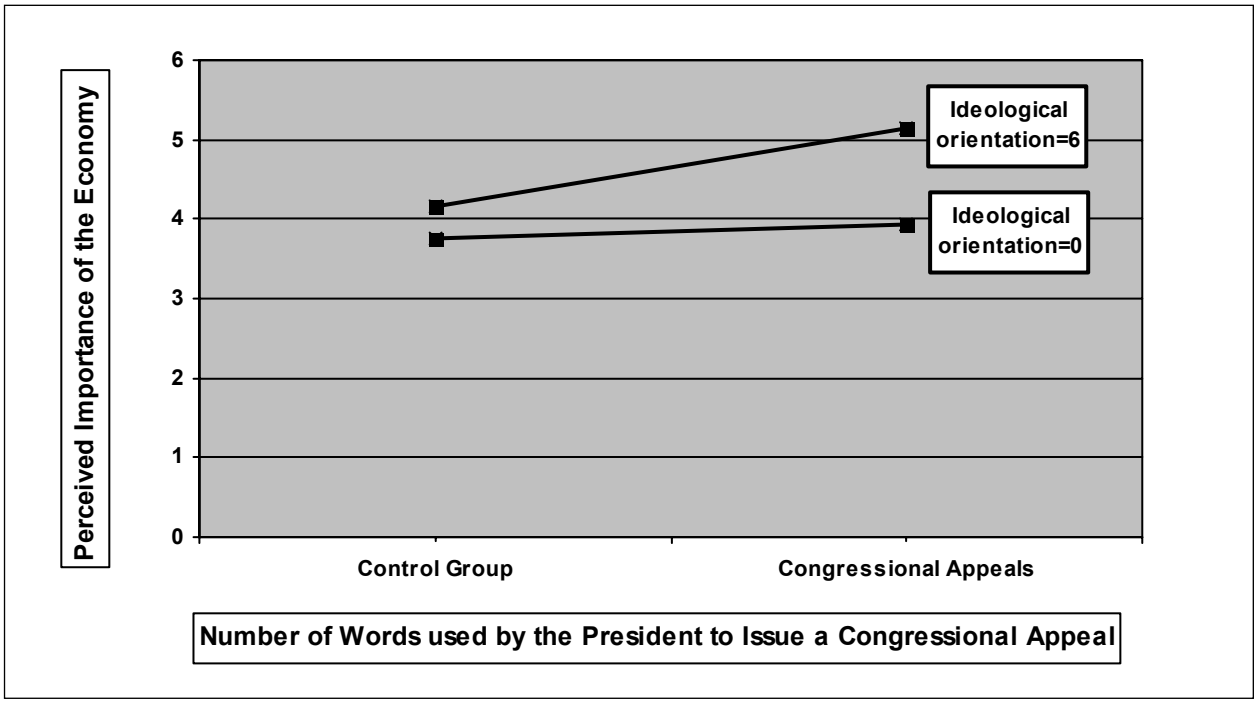

FIGURE 33. The Moderating Effect of Ideological Orientation on the Relationship Between Congressional Appeals and the Public Agenda

the importance of the economy an average of .132 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Also, strong liberal subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .792 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

Because the hypothesis for the uninteracted ideological orientation variable is directional in nature, its influence was interpreted using a one-tailed test of statistical significance. The uninteracted ideological orientation variable shows that strong conservatives in the control group are more likely to believe the economy should be addressed than strong liberals in the control group. In more specific terms, subjects in the control group are expected to rate the economy an average of .07 units higher on the 7-point scale of economic importance for each one-unit increase on the seven-point scale of ideological orientation. Finally, the results of the incremental F-test shown in table 24 indicate that the F-statistic of 29.780 computed for the Unconstrained Model is of significantly greater magnitude than the F-statistic of 14.780 computed for the Constrained Model. Simply stated, the proportion of variance in economic perceptions explained by the interaction terms (.414) is significantly greater than the proportion of variance in economic perceptions explained by the model that did not include these interaction terms (.292).

TABLE 24. Incremental F-Test of Constrained and Unconstrained Ideological Orientation Models

Model	R^2	F	Sig. (Change in F)
Constrained model (without interactions)	.292	14.780	
Unconstrained model (with interactions)	.414	29.832	.000

Note: Incremental F-Test determines whether the increase in variance explained by the Unconstrained Ideology Model over and above the variance explained by the Constrained Ideology Model is statistically significant.

4. Political Sophistication

The final set of hypotheses explores the moderating effect of subjects' political sophistication on the relationship between presidential rhetoric and perceived economic importance. More specifically, Hypothesis 7 predicts that those with the ability to engage in the systematic processing of political information are more likely to be influenced by President Bush's rhetoric than subjects who do not possess such ability. To estimate the effect of ability, this study relies on a five-item index of political knowledge. The results of the political knowledge model appear in Table 21. Collectively, the variables in this model account for almost 33% of the variance in subjects' economic perceptions. The results also indicate that subjects with high levels of political knowledge were significantly more influenced by all three of President Bush's rhetorical appeals than subjects with low levels of political knowledge. The moderating effect is demonstrated in Figures 34 through 36. First, for each one-unit increase on the six-point scale of political knowledge, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .170 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. In other words, for a maximum increase of five on the six-point scale of political knowledge, subjects in the congressional *appeal* condition are expected to rate the importance of the economy an average of .850 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

Second, for each one-unit increase on the 6-point scale of political knowledge, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .130 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. State differently, for a maximum increase of five on the six-point scale of

TABLE 25. The Influence of Political Knowledge on the Relationship Between Presidential Rhetoric and the Perceived Importance of the Economy

Independent Variable	b	Se	t
Presidential Rhetoric			
Issue justification	.354	.180	1.92
Congressional appeal	.150	.291	0.52
Credit Claiming w/ evidence	.212	.287	0.74
Pure control group	.493	.398	1.24
Political Knowledge	.219	.049	4.46***
Interactions			
Political knowledge x Issue justification	.130	.044	2.98**
Political knowledge x Congressional appeal	.170	.061	2.79**
Political knowledge x Credit claiming w/ evidence	-.339	.100	-3.39**
Political knowledge x Pure control group	-.366	.141	-2.60*
Control Variables			
Prior agenda	.103	.138	0.75
Tax cuts	.092	.118	0.78
Unemployment benefits	.102	.083	1.23
Job assistance	.031	.053	0.59
Income	-.049	.036	-1.38
N	340		
R^2	.325		
Adjusted R^2	.296		
Constant	4.052	.253	15.99***

Note: OLS regression results with unstandardized coefficients. The dependent variable is the perceived importance of the economy (0=not at all important; 6=extremely important). *p <.05; **p <.01; ***p <.001. Two-tailed.

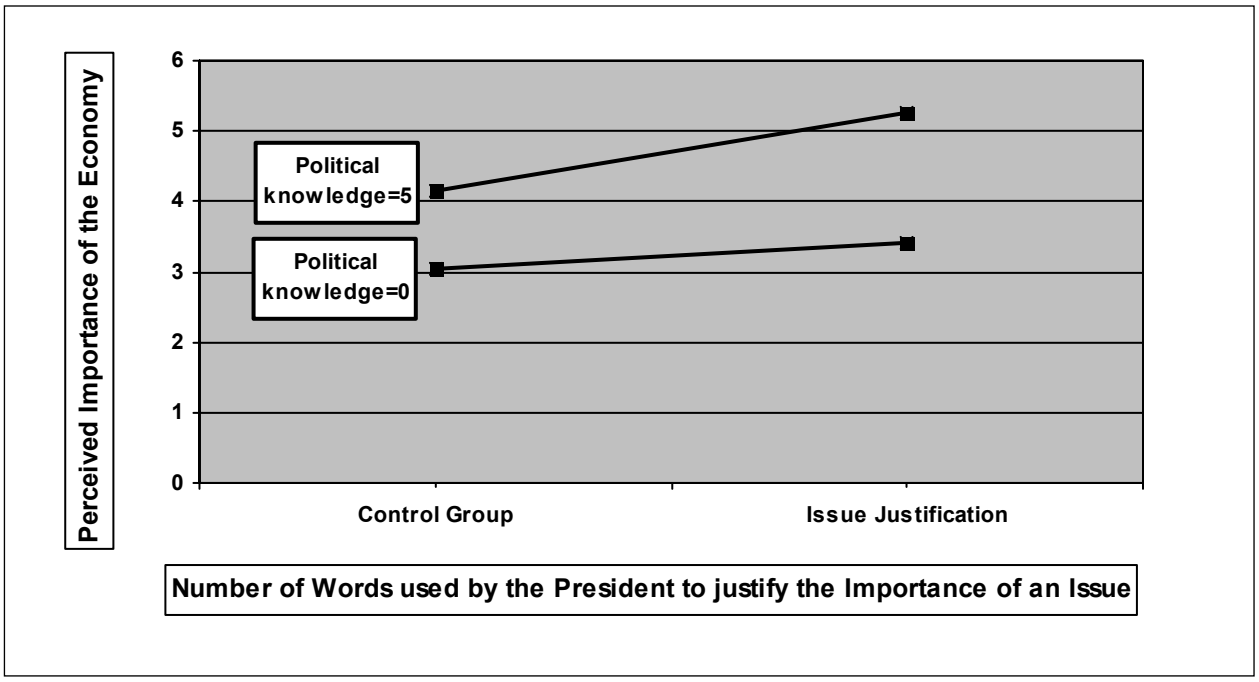

FIGURE 34. The Moderating Effect of Political Knowledge on the Relationship Between Issue Justification and the Public Agenda

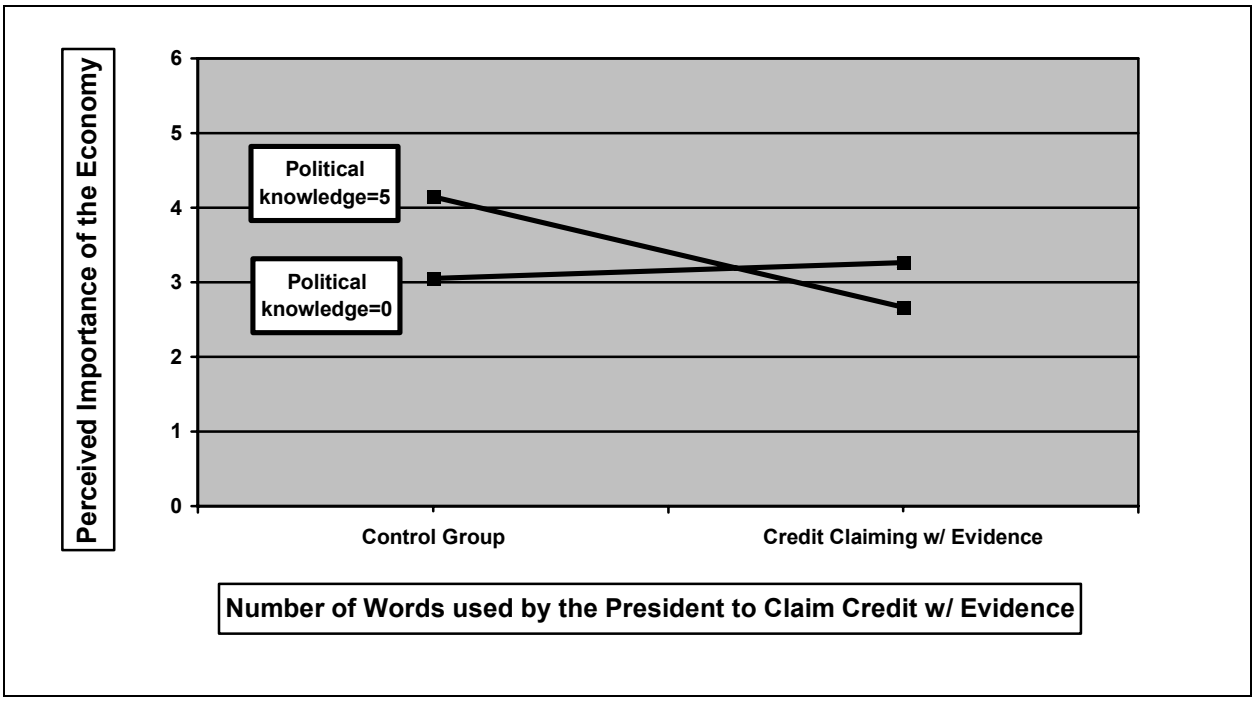

FIGURE 35. The Moderating Effect of Political Knowledge on the Relationship Between Credit Claiming with Evidence and the Public Agenda

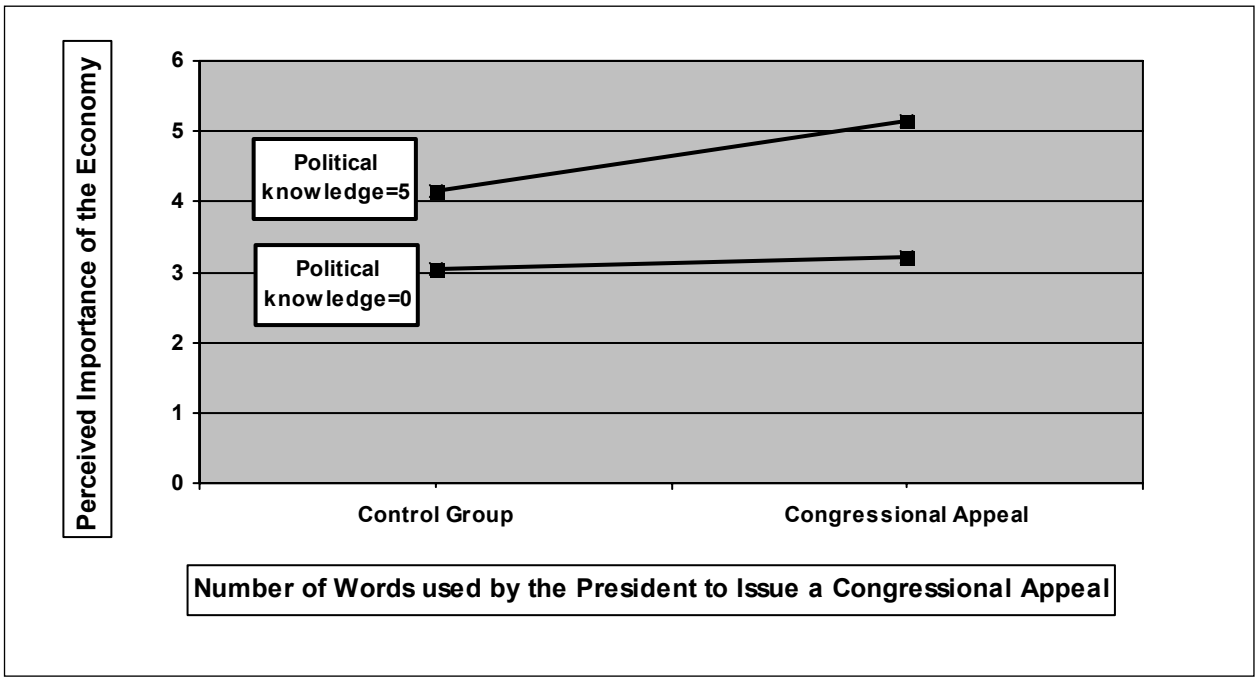

FIGURE 36. The Moderating Effect of Political Knowledge on the Relationship Between Congressional Appeals and the Public Agenda

political knowledge, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .650 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

Third, for each one-unit increase on the six-point scale of political knowledge, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .339 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. In other words, for a maximum increase of five on the six-point scale of political knowledge, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of 1.695 units *lower* on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

Remarkably, none of the uninteracted presidential variables proved significant in the political knowledge model. Thus, subjects exposed to President Bush's rhetorical appeals with a

political knowledge score of zero were no more likely to believe the economy should be addressed than subjects with a political knowledge score of zero in the control group. Interestingly, this finding suggests that President Bush's rhetoric was of minimal persuasive significance among subjects who did not possess the ability to process, store, and apply the information contained in that rhetoric in later decision making tasks.

Considered last is the uninteracted political knowledge variable, which represents the effect of political knowledge on perceptions of economic importance expressed by subjects in the control group. Clearly, subjects in the control group with high levels of political knowledge are significantly more likely to believe the government should address the economy than subjects in the control group with low levels of political knowledge. More precisely, subjects in the *control group* are expected to rate the economy an average of .219 units higher on the seven-point scale of economic importance for each one-unit increase on the six-point scale of political knowledge, ceteris paribus. From another perspective, subjects in the *control group* with a maximum political knowledge score of five are expected to rate the economy an average of 1.095 units higher on the seven-point scale of economic importance than subjects in the control group with a minimum political knowledge score of zero, ceteris paribus. Thus, subjects in the control group with high levels of political knowledge were better able to understand, process, and call upon President Bush's rhetoric in subsequent evaluations of the importance of the economy.

Finally, the results of the incremental F-Test confirm that the F-statistic of 33.122 computed for the Unconstrained Model is significantly greater than the F-statistic of 14.840 computed for the Constrained Model. Thus, the interaction terms in the Knowledge model

explain a significant amount of variance in economic perceptions (.325) over and above the model that does not include the interaction terms (.284).

TABLE 26. Incremental F-Test of Constrained and Unconstrained Political Knowledge Models

Model	R^2	F	Sig. (Change in F)
Constrained model (without interactions)	.284	14.840	
Unconstrained model (with interactions)	.325	33.122	.000

Note: Incremental F-Test determines whether the increase in variance explained by the Unconstrained Knowledge Model over and above the variance explained by the Constrained Knowledge Model is statistically significant.

Finally, Hypothesis 8 predicts that subjects with the motivation to engage in the systematic processing of political information are likely to be more receptive to President Bush's rhetoric than subjects without such motivation. Politically attentive subjects – subjects who are interested in politics, discuss politics with their family and friends, and frequent media coverage of politics – are expected to be more receptive to presidential rhetoric than inattentive subjects. The results of the political attentiveness model are shown in Table 22. They show, first of all, that the variables collectively explain almost 36% of the variance in perceptions of the importance of the economy. The results also clearly establish the moderating effect of political attentiveness on the relationship between all three of President Bush's rhetorical appeals and subjects' perceptions of the importance of the economy. The moderating effects of political attentiveness are graphically depicted in Figures 37 through 39.

First, for each one-unit increase on the 41-point scale of political attentiveness, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .033 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. Interpreted as a full range shift, for a maximum increase of 40 on the

TABLE 27. The Influence of Political Attentiveness on the Relationship Between Presidential Rhetoric and the Perceived Importance of the Economy

Independent Variable	b	Se	t
Presidential Rhetoric			
Issue justification	.053	.022	2.41*
Congressional appeal	.140	.232	0.60
Credit Claiming w/ evidence	-.174	.264	-0.66
Pure control group	-.515	.329	1.57
Political Attentiveness	.030	.010	2.99**
Interactions			
Political attentiveness x Issue justification	.045	.012	3.87***
Political attentiveness x Congressional appeal	.033	.010	3.21**
Political attentiveness x Credit claiming w/ evidence	-.061	.020	-3.05**
Political attentiveness x Pure control group	-.100	.028	-3.59***
Control Variables			
Prior agenda	.015	.139	0.11
Tax cuts	.028	.119	0.23
Unemployment benefits	.069	.084	0.01
Job assistance	.018	.053	0.33
Income	.069	.036	1.91
N	340		
R^2	.355		
Adjusted R^2	.327		
Constant	4.111	.234	17.57***

Note: OLS regression results with unstandardized coefficients. The dependent variable is the perceived importance of the economy (0=not at all important; 6=extremely important). *p <.05; **p <.01; ***p <.001. Two-tailed.

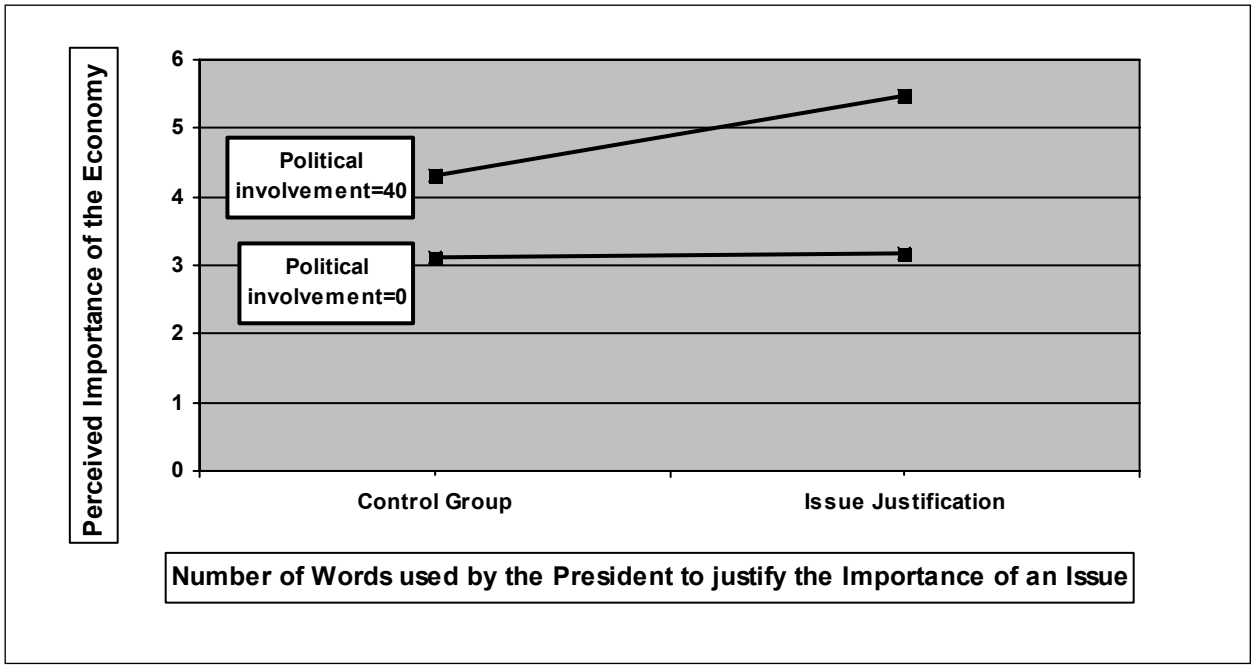

FIGURE 37. The Moderating Effect of Political Attentiveness on the Relationship Between Issue Justification and the Public Agenda

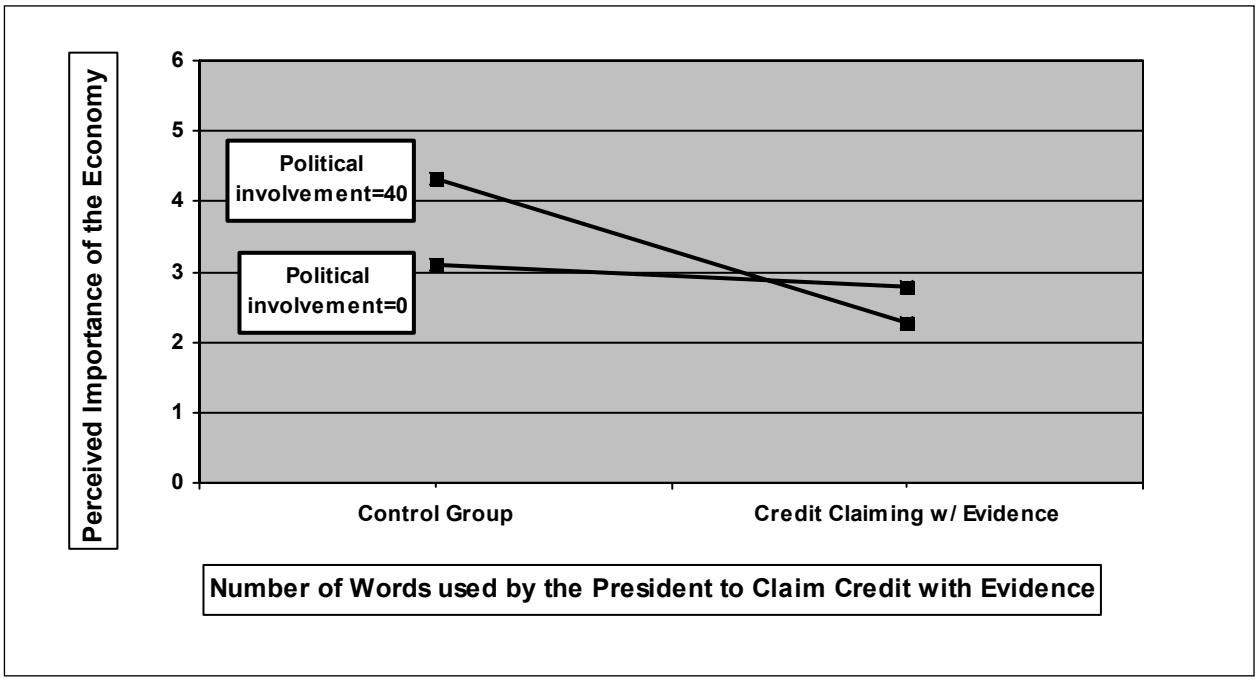

FIGURE 38. The Moderating Effect of Political Attentiveness on the Relationship Between Credit Claiming with Evidence and the Public Agenda

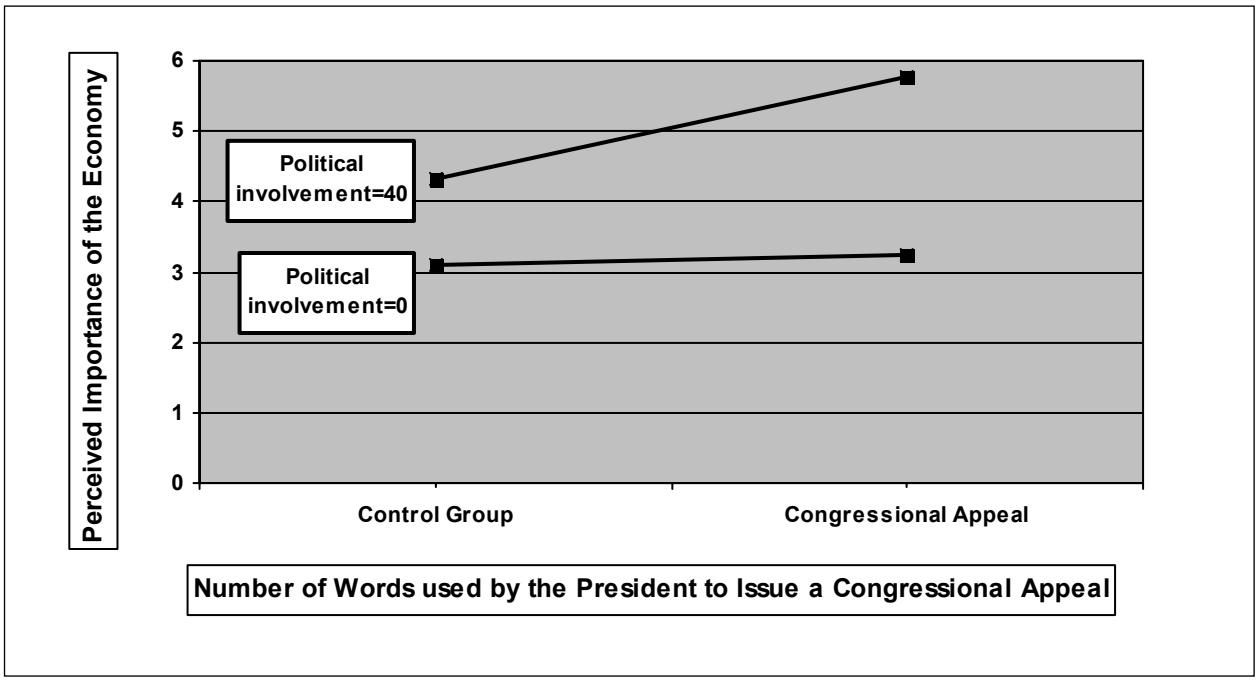

FIGURE 39. The Moderating Effect of Political Attentiveness on the Relationship Between Congressional Appeals and the Public Agenda

41-point scale of political attentiveness, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of 1.320 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

Second, for each one-unit increase on the 41-point scale of political attentiveness, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of .045 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus. In terms of a full range shift, for a maximum increase of 40 on the 41-point scale of political attentiveness, subjects in the *congressional appeal* condition are expected to rate the importance of the economy an average of 1.800 units higher on the seven-point scale of economic importance than subjects in the *control group*, ceteris paribus.

Third, for each one-unit increase on the 41-point scale of political attentiveness, subjects in the *credit claiming with evidence* condition are expected to rate the importance of the economy an average of .061 units *lower* on the 7-point scale of economic importance than subjects in the *control group*, ceteris paribus. Interpreted as a full range shift, for a maximum increase of 40 on the 41-point scale of political attentiveness, subjects in the *issue justification* condition are expected to rate the importance of the economy an average of 2.440 units *lower* on the seven-point scale than subjects in the *control group*, ceteris paribus.

Only one of the uninteracted presidential rhetoric variables proved to be a statistically significant predictor of perceptions of economic importance. The uninteracted presidential rhetoric variables measure the influence of a given form of rhetoric among subjects with a political attentiveness score of zero. Politically inattentive subjects in the *issue justification* condition are expected to rate the importance of the economy an average of .053 units higher on the seven-point scale of economic importance than politically inattentive subjects in the *control group*, ceteris paribus.

The uninteracted political attentiveness variable illustrates the influence of this variable on perceptions of economic importance expressed by subjects in the control group, that is, when the value of each presidential rhetoric variable is equal to zero. Subjects in the control group are expected to rate the importance of the economy an average of .030 units higher for each one-unit increase on the 41-point scale of political attentiveness. Viewed from a different perspective, subjects in the control group with a maximum political attentiveness score of 41 are expected to rate the importance of the economy an average of 1.200 units higher on the seven-point scale of economic importance than subjects in the control group with a minimum political attentiveness score of zero, ceteris paribus. Thus, as the results of Tables 21 and 22 demonstrate, subjects in

the control group with high levels of political knowledge and attentiveness were significantly more likely to believe the government should address the economy than subjects in the control group with low levels of knowledge and attentiveness.

Finally, the results of the incremental F-test in Table 28 demonstrate that the F-statistic computed for the Unconstrained Model of 19.494 is significantly greater than the F-statistic computed for the Constrained Model of 12.430. Thus, the proportion of variance explained by the interaction terms in the Attentiveness model (355) is significantly greater than the proportion of variance explained by the model that did not include these interactions (.251).

TABLE 28. Incremental F-Test of Constrained and Unconstrained Political Attentiveness Models

Model	R^2	F	Sig. (Change in F)
Constrained model (without interactions)	.251	12.430	
Unconstrained model (with interactions)	.355	19.494	.000

Note: Incremental F-Test determines whether the increase in variance explained by the Unconstrained Attentiveness Model over and above the variance explained by the Constrained Attentiveness Model is statistically significant.

G. EVALUATING PRESDIENTIAL RHETORIC

This experimental analysis suggests a number of intriguing patterns concerning the influence of presidential rhetoric on perceptions of economic importance. To guide the following discussion, Table 23 provides a comprehensive summary of the results showing the influence of presidential rhetoric on perceptions of economic importance. This table shows the influence of each of the presidential rhetoric variables on perceived importance of the economy in each of the heavily influenced by the presidential rhetoric to which they were exposed. Subjects who watched President Bush justify the importance of the economy and appeal to Congress for action on the economy were more likely to believe government should take action to address the

economy. Conversely, subjects who watched President Bush claim credit for tax cuts designed to help provide relief to middle-income families were less likely to believe government should address the economy.

Second, the results of Study 3 have also identified several important moderators of the influence of presidential rhetoric. Generally speaking, the influence of presidential rhetoric on the perceived importance of the economy was greater among subjects who expressed favorable evaluations of President Bush's personal characteristics, approved of his performance, held similar partisan and ideological views as the president, and possessed the ability and motivation to engage in the systematic processing of presidential rhetoric. However, as a testament to the importance of presidential rhetoric, President Bush's issue justification, congressional appeal, and credit claiming were influential, even among subjects who did not share these characteristics. Two important exceptions to this rule are the Political Knowledge and Political Attentiveness Models. The results of both clearly demonstrate that presidential rhetoric was, generally speaking, *only* influential among subjects with high levels of ability and motivation to engage in the systematic processing of political information.

Third, Table 23 shows that most of the moderator variables were not, by themselves, influential determinants of economic perceptions. For example, subjects who expressed favorable evaluations of President Bush's characteristics were not more likely believe the economy should be addressed than subjects who voiced negative evaluations of Bush's characteristics. Political knowledge and political attentiveness stand, once again, as notable exceptions to this pattern. Subjects in the control group who were politically knowledgeable and attentiveness in politics were more likely to believe government should take action to address the

economy than subjects who did not share these characteristics. At the time the experiments were conducted, the unemployment rate was 6%, the highest since 1994. Not surprisingly, the issue of the economy loomed large on the national public agenda during the entire fall of 2003. According to a Harris survey conducted from October 14 to October 19, 30% of the public considered the economy to be the most important issue facing America. Coming in at a distant second, only 18% believed the ongoing war in Iraq represented the nation's most pressing problem. Thus, it should not come as a surprise to learn that subjects who were knowledgeable about politics, discussed politics with friends and family, and sought out media coverage of politics were more likely to believe government should address the economy than subjects who did not share these characteristics.

TABLE 29. Summary Table for Study 3: Presidential Rhetoric and the Perceived Importance of the Economy

		Presidential Support		*Political Predispositions*		*Political Sophistication*	
Independent Variable	Presidential Rhetoric Model	Personal Characteristics Model	Presidential Approval Model	Partisan Identification Model	Ideological Orientation Model	Political Knowledge Model	Political Attentiveness Model
Presidential Rhetoric							
Issue justification	✓	✓	×	✓	×	✓	×
Congressional appeals	✓	×	✓	✓	✓	×	×
Credit claiming w/ evi.	✓	✓	✓	✓	✓	×	×
Pure control group	✓	✓	✓	✓	×	×	×
Moderator Variables							
Personal characteristics	—	×	—	—	—	—	—
Presidential approval	—	—	×	—	—	—	—
Partisan identification	—	—	—	×	—	—	—
Ideological orientation	—	—	—	—	×	—	—
Political knowledge	—	—	—	—	—	✓	—
Political attentiveness	—	—	—	—	—	—	✓
Interactions							
Issue justification	—	✓	✓	✓	×	✓	✓
Congressional appeals	—	✓	✓	✓	✓	✓	✓
Credit claiming w/ evi.	—	✓	✓	✓	✓	✓	✓
Pure control group	—	×	×	×	✓	✓	✓

Note: This table summarizes the results from all models estimated in Study 3. Each presidential rhetoric variable under the "Interactions" heading represents the influence of a rhetoric variable when interacted with a particular moderator. Checkmarks denote statistically significant variables, Xs denote nonsignificant variables. Hyphens denote variables not in the model.

VIII. SUMMARY AND CONCLUSIONS

A. CONTRIBUTIONS

Traditional conceptions of presidential power portray presidents as authoritative leaders of public opinion (e.g. Neustadt 1960). As the preceding review of the literature has illustrated, presidents are able to use their speeches to influence their approval levels and the public's policy preferences, but little is understood about either the magnitude or the duration of these effects. Comparatively little effort has been invested in the study of the president's influence on the public agenda. While a modest literature has revealed presidential speeches as important determinants of the public agenda, a number of significant gaps remain. Most research is confined to just a few presidential administrations across a limited umber of years, most examines only a limited number of salient issues, and very little is understood about what makes some speeches more effective than others (but see Cohen 1995). The preceding represents a modest attempt to bridge these gaps and offers a contribution to the ongoing debate about the president's ability to set the public agenda.

The research strategy employed in this dissertation relies on a variety of methodological techniques and procedures, including structural equation modeling, the Heckman two-step procedure for modeling selection bias, multiple logistic regression analysis, and Ordinary Least Squares (OLS) regression analysis. Also, each of the three studies draws from multiple and varied sources of data, including a richly detailed analysis of the content of State of the Union Addresses from 1946 to 2003, an aggregate-level public opinion dataset used in Study 1,

individual level data collected immediately following four State of the Union Addresses delivered by 4 different presidents in Study 2, and data generated from an experimental analysis of presidential rhetoric conducted in Study 3. In addition, Study 3 relies on actual edited video of a presidential speech as an experimental stimulus, a method preferable to experimental designs that expose subjects to artificial newspaper articles containing passages of the president's rhetoric. Finally, this dissertation considers the question of presidential agenda setting across a span of 57 years, covering more than one thousand issues across 11 different presidential administrations.

B. CENTRAL FINDINGS

The results suggest a number of findings, each with important implications for the study of presidential rhetoric. First, in a convergence of findings, the results of all three studies point to a number of effective rhetorical strategies available to presidents in their efforts to craft speeches designed to influence the public agenda. Issue justifications, congressional appeals, and credit claiming were revealed as important determinants of the public agenda in all three studies. Interestingly, however, not all of the strategies useful in setting the public agenda proved effective in setting the media agenda. While credit claiming without evidence, congressional appeals, and agenda size influenced the former, credit claiming with evidence, fear appeals, and American values influenced the latter. Whether the media are influenced by the same tactics of political persuasion as the public, as the results collectively suggest, remains an issue for future research to address.

Second, the results of all three studies strongly suggest that the process of presidential agenda setting is bi-directional in nature. That is, presidents use their rhetoric, not only convince

the public that certain issues represent important issues requiring government attention, but also to convince the public that an issue has already been addressed and no longer represents a legitimate cause for public concern. Credit claiming, when used successfully, enables presidents to coax issues off of the public agenda, making room for their most important priorities. Also, as an additional benefit of credit claiming, the public may come to view presidents more favorably in the light of the progress made by their administrations in dealing with certain issues.

Third, as the results of Studies 1 and 2 make clear, presidents must compete with other sources of influence in their attempts to influence the public agenda. Contextual factors proved to be potent predictors of issue salience among the public, often outweighing the influence of presidential rhetoric. However, as the results of both studies clearly indicate, even after controlling for the robust influences of media coverage, the prior public agenda, and economic conditions, presidents were still able to use the rhetoric in their State of the Union Address to get their message across to the public.

Fourth, Study 1 provides evidence of the duration of the influence of presidential rhetoric. In the results of this particular study it is evident that, in several cases, presidential rhetoric persists as an important determinant of the public agenda a full six months after the State of the Union Address was given. Immediately after the address, the total effects of presidential rhetoric and contextual factors are relatively even. As the amount of time since the State of the Union was delivered increases, however, the influence of the president's rhetoric begins to wane. While the influence of contextual factors also declines over time across the six month period, the drop off is not quite as steep.

Fifth, Study 1 highlights important indirect effects of president rhetoric, many of which have been missed in extant research on presidential agenda setting. Importantly, Study 1

demonstrates that much of the influence of presidential rhetoric immediately after the president's speech is felt *directly* among those who watched the speech. However, as the amount of time since the speech was delivered increases, the influence of presidential rhetoric becomes ever more indirect in nature, by way of an influence on media coverage that takes place after the president's speech. Thus, while the memory of the president's speech fades from the public mind in relatively short order, the results of Study 1 demonstrate that presidents are able to sustain their influence on the public agenda by influencing the content of media coverage during the 6 month period after the speech.

Sixth, taken together, the results provide little evidence suggesting there are significant differences in the ability of individual presidents to set the public agenda. The results of Study 1 show that presidents since Ford were more effective in setting the public agenda. This finding is more suggestive of a "learning curve" in presidents' ability to set the agenda, than the importance of the rhetorical strengths and weaknesses possessed by individual presidents. In Study 2, neither of the Bushes, both noted for their rhetorical weaknesses, was significantly less effective in setting the public agenda than their supposedly more rhetorically skilled colleagues, Reagan and Clinton.

Seventh, while the results of Study 1 show presidential rhetoric to be an important factor in aggregate-level assessments of issue salience, Studies 2 and 3 reveal that such influence is not likely to be felt uniformly across all segments of the president's audience. Quite the contrary, both studies point to several important moderators of the relationship between presidential rhetoric and perceptions of issue importance. Together, Studies 1 and 2 demonstrate exposure to the president's speech, presidential support (vote choice, approval, and personal characteristics), political predispositions (party and ideology), membership in partisan coalitions (Democratic and

Republican coalitions), and political sophistication (political knowledge and attentiveness) all have the capacity to affect the extent to which individuals consider presidential rhetoric in their evaluations of issue salience.

Eighth, the results also demonstrate the value of studying the influence of presidential rhetoric using data collected at the level of the individual. Study 2, conducted using individual-level data, detected several mechanisms of influence missed in the aggregate-level analyses performed in Study1. Public appeals, fear appeals, appeals to American values, and compare and contrast all proved to be statistically significant predictors of the public agenda in Study 2, but not Study 1.

Finally, the results of Study 1 demonstrate that presidents are responsive, at least to some extent, to environmental conditions in their decisions of what issues to discuss in their State of the Union Addresses. First, when the media covered an issue before the speech, presidents were likely to mention that issue in their speech. Second, as economic conditions worsened, presidents were more likely to discuss economic issues in their speeches. Third, when the nation was embroiled in military conflict at the time of the speech, the president was more likely to mention foreign policy and defense-related issues. Finally, when public concern about an issue was already high before the speech, presidents were likely to mention that issue in their speech. This particular finding is echoed in previous research examining the democratic responsiveness of politicians to public opinion (Jacobs and Shapiro 2003). The authors found that politicians do in fact pay close attention to public opinion when it comes to crafting their public statements. Rather than use this "crafted talk" to propose policies in accordance with the public's preferences, politicians instead use their public statements as an attempt to move public opinion closer to their own desired policies. Thus, politicians are responsive to public opinion in their

decisions of which issues to cover in their speeches, even as they seek to manipulate the public's preferences on those very same issues.

These findings suggest that the ability of presidents to shape the public agenda through their State of the Union Addresses is constrained by the reactionary nature of the office of the presidency. If the country is at war, the president cannot avoid discussing foreign policy and matters of national defense. If the economy is in recession, the president would be foolhardy not to discuss the administration's plans to address the nation's economic troubles. If the public is already concerned about an issue, presidents may choose to ignore that issue in their speech, but only at their own peril. Thus, a significant portion of every State of the Union Address delivered by every president is taken up with what might be termed "non-discretionary items" over which the president is able to exert little or no control. While the utility of the State of the Union Address as a tool for setting the public agenda is considerably limited by the environmental context in which that speech is given, presidents may still be able to reserve a portion of their speech as a small window of opportunity in which to focus on their most important issue priorities. But does it matter what presidents say?

In response to this question, the results of the empirical analyses speak with a single voice. By strategically using the limited window of opportunity afforded by the State of the Union Address, presidents are able to employ their rhetoric in successful attempts to set the public's issue agenda. While the effects of presidential in each of the three studies are moderately sized, presidents rarely rely on a single rhetorical strategy in their discussion of an important issue. At the same time, presidents cannot use every single rhetorical appeal in their discussion of every issue. Instead, presidents must craft their speeches strategically, making the greatest rhetorical investment in issues that represent their most important priorities. To enhance

their influence on the public agenda, the results collectively suggest that presidents are well advised to spend a great deal of time focusing on a limited number of issues, justify the importance of those issues, appeal to Congress for legislative action when appropriate, discuss their most important issues at the beginning of the speech, and spend the week following the State of the Union Address reinforcing the importance of issues mentioned in the address. By adopting such a rhetorical plan of attack, presidents can all but guarantee that it will matter what they say.

C. PRESIDENTS AND THE PUBLIC: A FINAL APPRAISAL

The most compelling evidence bearing on the question of the president's leadership of public opinion sees the cup of presidential influence as half-empty. First, this literature argues, presidents are limited in their ability to influence the public's policy preferences with the rhetoric in their speeches. And they are. Moreover, the empirical record strongly indicates that objective conditions, or contextual factors, often outweigh the influence of presidential speeches as determinants of public opinion. And they do. Furthermore, the utility of the presidential speech is significantly constrained by the decline in the proportion of Americans who regularly watch such speeches. And it is. Additionally, the preponderance of the evidence further suggests that presidents are inherently reactive in the kinds of issues they decide to discuss in their State of the Union Addresses. And they are. In fact, many of the issues discussed by the president in their speeches are stimulated by the presence of objective conditions; including economic conditions, media coverage leading up to the speech, whether the country is involved in armed conflict at the time of the speech, and the occurrence of important events just before the speech.

Despite the formidable obstacles to presidential leadership of public opinion, the approach taken in this dissertation has been to view the cup of presidential influence as half-full. First and foremost, although presidents are not able to convince the public to change its attitudes toward issues mentioned in their speeches, they are more successful in their attempts to convince the public that the issues mentioned in their speeches should at least be addressed by government.

Second, that objective conditions are often more important determinants of public opinion should not be confused with the false notion that presidential rhetoric is unimportant. To the contrary, the results presented in Studies 1, 2, and 3 show that presidents are able to heighten the level of concern about issues they wish to place on the public agenda, and reduce the salience of issues they wish to remove from the public agenda.

Third, the presidential literature is quick to note the decreasing frequency with which Americans watch presidential speeches. However, the results of Study 1 and 2 clearly indicate that citizens need not have watched the president's speech in order to be influenced by its rhetoric. Media coverage after the State of the Union address resulted in a strong indirect effect on public perceptions of issue salience expressed even by those who did not watch the president's speech.

Finally, the political environment does influence what issues presidents ultimately choose to discuss in their State of the Union Addresses, but not overwhelmingly so. To be certain, objective conditions present at the time of the State of the Union Address make it essential that some issues be discussed, and other issues *not* be discussed. In times of economic distress, for example, presidents are expected to use their speeches to propose new policies to address the country's economic problems. However, during such periods of economic decline presidents are

not expected to unveil costly new social programs that would lead to new tax increases and further drain public coffers. While presidents are expected to addresses some issues, and a number of other issues are off limits, the content of the remainder of the speech is left to the president's discretion. It is in this portion of the State of the Union Address that the potential for presidential leadership is most likely to be realized. President George W. Bush's 2004 State of the Union Address is illustrative of this point. While his address gave the requisite attention to the ongoing military operations in Iraq, Bush also highlighted the problem of steroids in professional sports and the need for a constitutional amendment to prohibit gay marriage, issues that were not on the public agenda or being covered by the media at that particular time.

Even during times of war and economic difficulty presidents have been able to lead the public on their administration's most important priorities. Eisenhower led achieved public and government support for a national interstate highway system; Kennedy ignited America's interest in space exploration; Johnson focused the public's attention on civil rights reforms; Carter increased public concern about human rights issues; Reagan fueled public demand for increased governmental reform; and Clinton convinced the public of the need for health care reform.

As the only official elected by a national constituency, presidents stand alone in their capacity to shape public opinion. Unlike Congress, whose power is deeply fragmented and dispersed, presidents can act with dispatch and instantly attract a national audience with a prime time television address. Thus, the office of the presidency is well suited to leading the public, particularly in times of national crisis, when such leadership is most immediately needed. Much as Franklin Roosevelt directed the nation's war effort during World War II, presidents are able to use their speeches to focus the nation's attention on the most urgent issues of the day. Thus, in

this specific sense, presidential speeches serve as an important linkage mechanism in the modern American democratic system of governance. Indeed, the health of American democracy depends in part on the ability of its presidents to use their speeches to direct the public's attention to important problems, and to convince the public that action should be taken to address those problems. To be effective, leaders must lead. The presidential speech, and the rhetoric contained therein, provides the chief mechanism by which the modern president has sought to exercise such leadership.

"My view was that every officer, and above all every executive officer in high position, was a steward of the people bound actively and affirmatively to do all he could for the people, and not to content himself with the negative merit of keeping his talents undamaged in a napkin. I declined to adopt the view that what was imperatively necessary for the Nation could not be done by the president unless he could find some specific authorization to do it. My belief was that it was not only his right but his duty to do anything that the needs of the Nation demanded unless such action was forbidden by the Constitution or the laws."

Theodore Roosevelt, 26th President of the United States (1913)

APPENDIX A

CONTENT ANALYSIS: SELECTED EXAMPLES OF PRESIDENTIAL RHETORIC IN STATE OF THE UNION ADDRESSES, 1946-2003

Presidential rhetoric	President and year of address	Selected example	Issue
Issue justification	JFK 1961	"Our recovery from the 1958 recession, moreover, was anemic and incomplete. Our gross national product never regained its full potential. Unemployment never returned to normal levels. Maximum use of our national industrial capacity was never restored. In short, the American economy is in trouble."	Economy
Congressional appeals	HST 1946	"The Congress has a clear responsibility to meet this challenge with courage and determination. I have every confidence that it will do so. I strongly urge that the Congress now resolve all doubts and as soon as possible adopt legislation continuing rent and price controls in effect for a full year from June 30, 1946."	Inflation
Public appeals	WJC 1994	"Hunters must always be free to hunt. Law-abiding adults should always be free to own guns to protect their homes. I respect that part of our culture, I grew up in it. But I want to ask sportsmen and others who lawfully own guns to join us in the campaign to reduce gun violence. I say to you, I know you didn't create this problem, but we need your help to solve it."	Gun control

Presidential rhetoric	President and year of address	Selected example	Issue
Fear appeals	GRF 1975	"If we don't act to slow down the rate of increase in federal spending, the United States treasury will be legally obligated to spend more than $360 billion in fiscal year 1976, even if no new programs are enacted. These are not matters of conjecture or prediction, but again, a matter of simple arithmetic. The size of these numbers and their implications for our everyday life and the health of our economic system are shocking."	Government spending
Credit claiming without evidence	DDE 1956	"In the last year, the free world has seen major gains for the system of collective security: the accession to the North Atlantic Treaty Organization and western European union of the sovereign Federal German Republic; the developing cooperation under the southeast Asia Collective Defense Treaty; and the formation in the Middle East of the Baghdad Pact among Turkey, Iraq, Iran, Pakistan and the United Kingdom. In our own hemisphere, the Inter-American system has continued to show its vitality in maintaining peace and a common approach to world problems.	International cooperation
Credit claiming w/ evidence	WJC 1995	"You know, for years before I became president, I heard others say they would cut government and how bad it was. But not much happened. We actually did it. We cut over a quarter of a trillion dollars in spending, more than 300 domestic programs, more than 100,000 positions from the federal bureaucracy in the last two years alone. Based on decisions already made, we will have cut a total of more than a quarter of a million positions from the federal government, making it the smallest it has been since John Kennedy was president, by the time I come here again next year."	Government efficiency
American values	RWR 1982	"Our nation's long journey towards civil rights for all our citizens - once a source of discord - now a source of pride, must continue with no backsliding or slowing down. We must and shall see that those basic laws that guarantee equal rights are preserved and, when necessary, strengthened. Our concern for equal rights for women is firm and unshakable."	Civil rights

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APPENDIX B

STUDY 1: STRUCTURAL EQUATIONS IN THE ECONOMETRIC MODELS

Each equation[46] takes the form: $Y_{1i} = \alpha + \beta_1 Y_{2i} + \beta_2 Y_{3i} + \ldots + \beta_M Y_{Mi} + \gamma_1 X_{1i} + \gamma_2 X_{2i} + \ldots + \gamma_K X_{Ki} + \mu_{1i}$

where, β's = coefficients of the endogenous variables; $Y_1, Y_2, \ldots Y_M$ = M endogenous variables; γ's = coefficients of the exogenous variables; $X_1, X_2, \ldots X_K$ = K exogenous variables; α = intercept; μ = stochastic disturbances; i = number of observations

1. **Issue attention**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_I + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
2. **Issue justification**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_I + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
3. **Congressional appeals**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_I + \gamma_4$(conflict)$_I + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
4. **Public appeals**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_I + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
5. **Fear appeals**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
6. **Compare and contrast**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
7. **American values**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
8. **Agenda size**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
9. **Issue order**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$
10. **Foreign policy**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_{3(}$economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$

[46] Notation conventions are from Gujurati (1995).

11. **Credit claiming**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_3$(economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$

12. **Credit claiming with evidence**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i$ + γ_3(economic conditions)$_i + \gamma_4$(conflict)$_I + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$

13. **Post-address speeches**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_3$(economic conditions)$_i + \gamma_4$(conflict)$_I + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \mu_i$

14. **Media coverage**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_3$(economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \beta_1$(issue attent.)$_i + \beta_2$(issue just.)$_i$ + β_3(cong. appeals)$_i + \beta_4$(public appeals)$_i + \beta_5$(fear appeals)$_i + \beta_6$(values)$_i + \beta_7$(compare & contrast)$_i$ + β_8(agenda size)$_i + \beta_9$(issue order)$_i + \beta_{10}$(foreign policy)$_i + \beta_{11}$(credit claiming)$_i + \beta_{12}$(credit claiming with evidence)$_i + \beta_{13}$(post-address speeches)$_i + \mu_i$

15. **Public agenda**$_i$ = $\alpha + \gamma_1$(prior media coverage)$_i + \gamma_2$(prior public agenda)$_i + \gamma_3$(economic conditions)$_i + \gamma_4$(conflict)$_i + \gamma_5$(events)$_i + \gamma_6$(scandals)$_{2i} + \beta_1$(issue attent.)$_i + \beta_2$(issue just.)$_i$ + β_3(cong. appeals)$_i + \beta_4$(public appeals)$_i + \beta_5$(fear appeals)$_i + \beta_6$(values)$_i + \beta_7$(compare & contrast)$_i$ + β_8(agenda size)$_i + \beta_9$(issue order)$_i + \beta_{10}$(foreign policy)$_i + \beta_{11}$(credit claiming)$_i + \beta_{12}$(credit claiming with evidence)$_i + \beta_{13}$(post-address speeches)$_i + \beta_{14}$(media coverage)$_i + \mu_i$

APPENDIX C

STUDY 2: DESCRIPTIVE STATISTICS

TABLE C1. Descriptive Statistics for Presidential Rhetoric Variables and Moderators in Study 2

Independent Variable	*Mean*	*Standard Deviation*	*Minimum*	*Maximum*
Presidential Rhetoric				
Issue attention	215.18	261.32	27.00	1703.00
Issue justification	34.72	60.56	0.00	372.00
Credit claiming without evidence	13.57	37.82	0.00	205.00
Credit claiming w/ evidence	10.06	16.45	0.00	100.00
Public appeals	2.13	9.22	0.00	67.00
Congressional appeals	8.17	16.18	0.00	105.00
Fear appeals	2.39	7.60	0.00	38.00
American values	4.01	6.15	0.00	32.00
Compare and contrast	14.01	39.54	0.00	264.00
Foreign policy	0.25	0.96	1.00	1.00
Agenda size	18.61	4.93	12.00	24.00
Issue order	9.80	6.07	1.00	24.00
Moderators				
Exposure to the president's speech	0.48	0.50	0.00	1.00
Partisan predispositions	0.52	0.49	0.00	1.00
Ideological orientation	0.53	0.50	0.00	1.00
Presidential vote choice	0.37	0.48	0.00	1.00
Presidential approval	0.58	0.49	0.00	1.00
Democratic coalition	1.63	0.83	0.00	4.00
Republican coalition	1.58	0.85	0.00	4.00

APPENDIX D

STUDY 2: THE HECKMAN TWO-STEP PROCEDURE FOR ADDRESSING THE PROBLEM OF SELECTION BIAS

There are two classes of the selection bias problem. In the standard case, information is available for only some of the respondents. The standard form of selection bias applies to the case in which no information is available for respondents who did not watch the president's speech, (i.e. if those who did not watch the president's speech did not participate in the survey). In the second form of selection bias, often referred to as heterogeneity bias, information is available for all respondents, but the distribution of respondents over categories of the independent variable has taken place in a nonrandom, selective fashion. The heterogeneity bias in Study 2 occurs because those who chose watched the president's speech differ from those who did not watch the president's speech.

While many statistical packages feature the ability to estimate the Heckman two-step procedure, almost all of them are restricted to the standard form of selection bias (e.g. SAS, STATA, and LIMDEP). However, as Smits (2001) and Ploeg (1993) demonstrate, the Heckman two-step procedure can also be applied to the problem of heterogeneity bias using SPSS. Relying on the instructions provided by these authors, the Heckman two-step procedure was performed as follows:

1. In the first step the residuals, or individual predicted probabilities, computed by the Selection Model were saved as a new variable, IKL:

    Save pred(IKL)

2. Using the inverse cumulative distribution function of the normal distribution, the predicted probabilities were translated into quasi-probit scores using the Probit function in SPSS. The resulting quasi-probit scores were saved as the new variable, IPS:

    Compute IPS = Probit(IKL)

3. The variable IPS containing the quasi-probit scores was then used to calculate the Inverse Mill's Ratio, lambda.

    For respondents who saw the president's speech:
    compute LAMBDA =
    ((1/sqrt (2 * 3.141592654)) * (exp (-IPS * IPS * .05))) / cdfnorm (IPS)

For respondents who did not see the president's speech:
compute LAMBDA =
- ((1/sqrt (2 * 3.141592654)) * (exp (-IPS * IPS * .05))) / (1-cdfnorm (IPS))

4. The Inverse Mill's Ratio was then entered along with all the other variables, including the explanatory variables in the Selection Model, into the Regression Model. Finally, because the standard estimates of the regression estimates required correction because of heteroscedasticity (Breen 1996), the logistic regression of the Regression Model was estimated with White's robust standard errors.

5. Interpretation: The coefficient for Lambda indicates whether selection bias remains a problem in the Regression Model. A significant positive coefficient would indicate that those who watched the president's speech, compared to those who did not, have unmeasured characteristics which are positively related to the public agenda. The coefficient for the variable *exposure to the president's speech* indicates how large the difference is between those who did and did not watch the president's speech, even after controlling for the problem of selection bias.

APPENDIX E

STUDY 2: BIVARIATE CORRELATIONS

TABLE E1. Bivariate Correlations Between the Explanatory Variables and the Public Agenda in the Selection Model in Study 2

	Public agenda	*Partisan intensity*	*Ideological intensity*
Partisan intensity	.008		
Ideological Intensity	.003	.039**	
Political involvement	.008	.149**	.012**
Education	.002	.014**	-.027**
Age	.006	-.005	.011**

Note: Entries are Pearson correlation coefficients. *p <.01; **p <.001.

APPENDIX F

STUDY 3: CONTENT OF PRESIDENTIAL RHETORIC VIDEOS

Control Group Video

Segment #1:	"The unemployment rate today is 6%. That's low for an economy coming out of recession; it's higher than it should be – and the unemployment rate is projected to rise further in the short run. This hardship is concentrated in certain regions and in certain industries. Manufacturing jobs have declined for 28 months in a row. You know what I'm talking about in the Midwest. You're showing signs of recovery, but many people here and across this country are looking for work." (Length: 33 seconds)
Segment #2:	"Government spends a lot of money, but it doesn't build factories, it doesn't invest in companies, and it doesn't do the work that makes America go. The role of our government is not to manage or control the economy from Washington D.C., but to remove obstacles standing in the way of faster economic growth. That's our role." (Length: 26 seconds)

Issue Justification Video

Segment #1:	"The unemployment rate today is 6%. That's low for an economy coming out of recession; it's higher than it should be – and the unemployment rate is projected to rise further in the short run. This hardship is concentrated in certain regions and in certain industries. Manufacturing jobs have declined for 28 months in a row. You know what I'm talking about in the Midwest. You're showing signs of recovery, but many people here and across this country are still looking for work." (Length: 33 seconds)
Segment #2:	"Many Americans live in constant and increasing personal debt, with credit card bills so heavy they often cannot pay much more than the monthly minimums. Millions of citizens spend their entire adult lives living paycheck-to-paycheck, never getting the opportunity to save for their children's education or their own retirement. All this puts pressure on the family budget and clouds our economic future." (Length: 27 seconds)

Congressional Appeal Video

Segment #1:	"The unemployment rate today is 6%. That's low for an economy coming out of recession; it's higher than it should be – and the unemployment rate is projected to rise further in the short run. This hardship is concentrated in certain regions and in certain industries. Manufacturing jobs have declined for 28 months in a row. You know what I'm talking about in the Midwest. You're showing signs of recovery, but many people here and across this country are still looking for work." (Length: 33 seconds)
Segment #2:	"So I'm asking this new Congress to extend unemployment benefits that expired on December 28th. And the benefits should be retroactive – like the Fitzgerald Bill – so that people who recently lost their benefits can receive their benefits in full. Helping America's unemployed workers should be a first order of business in this new Congress." (Length: 26 seconds)

Credit Claiming with Evidence Video

Segment #1:	"The unemployment rate today is 6%. That's low for an economy coming out of recession; it's higher than it should be – and the unemployment rate is projected to rise further in the short run. This hardship is concentrated in certain regions and in certain industries. Manufacturing jobs have declined for 28 months in a row. You know what I'm talking about in the Midwest. You're showing signs of recovery, but many people here and across this country are still looking for work." (Length: 33 seconds)
Segment #2:	"So I worked with the United States Congress to reduce income taxes for everyone who pays them – more than 100 million individuals, families, and sole proprietorships received tax relief. This tax relief was the largest in a generation and will bring real and needed relief to middle-income families." (Length: 25 seconds)

APPENDIX G

STUDY 3: ITEM DESCRIPTIONS

Dependent Variable	*Item Description*
Perceived Importance of the Economy	"How important do you think it is for the government to take action to address the economy?"
Moderator Variables	
Personal Characteristics	
Integrity	"He says what he thinks, even if it isn't popular."
Compassion	"He understands the problems of people like you."
Intelligence	"He's very intelligent."
Vision	"He has a clear idea of where he wants to lead the nation."
Charisma	"He's very inspiring."
Presidential Approval	"Do you approve or disapprove of the job George W. Bush is doing as President."
Partisan Identification	Generally speaking, do you consider yourself to be a strong Democrat, moderate Democrat, leaning Democrat, Independent, leaning Republican, moderate Republican, or a strong Republican?"
Ideological Orientation	"On most political matters, would you say you are very liberal, liberal, somewhat liberal, moderate, somewhat conservative, conservative, or very conservative?"

Political Knowledge[47]	1. "Which party now controls the House of Representatives, the Democrats or Republicans?" 2. "What party is more conservative, Democrats or Republicans?" 3. "What job or political office is now held by Dick Cheney?" 4. "Whose responsibility is it to determine if a law is constitutional, the President, Congress, or Supreme Court?" 5. "How much of a majority is required for the Senate and House to override a presidential veto?" _____
Political Attentiveness [48]	1. "In general, how would you characterize your interest in politics: very interested, somewhat interested, not very interested, or not at all interested?" 2. "How often do you discuss politics with your friends or family: very often, somewhat often, not very often, or never?" 3. How many days a week do you watch national network news? _____ 4. How many days a week do you watch the 24-hour news channels (CNN, FOX News, MSNBC)? _____ 5. How many days a week do you read about politics in the newspaper? _____ 6. How many days a week do you listen to shows about politics on the radio? _____

Control Variables

Prior agenda	"In your opinion, what is the SINGLE most important issue or problem facing America today?" _____
Income	"According to your best guess, do you believe your parents' combined household income is under $20,000, above $20,000 but below $40,000, above 40,000 but below $60,000, above $60,000 but below $80,000, above $80,000 but below $100,000, or above $100,000?"
Tax Cuts	"If you HAD to choose, which one of the following would you prefer, a 15% tax cut benefiting all income groups EQUALLY, or a 15% tax cut benefiting ONLY low-income families?"
Unemployment Benefits	"Should the amount of unemployment benefits be greatly increased, somewhat increased, neither increased nor decreased, somewhat decreased, or greatly decreased?"

[47] The individual items were combined to form the 5-item scale of political knowledge recommended by Delli Carpini and Keeter (1993). The percentage of correct responses was, respectively, 69%, 54%, 53%, 75%, and 65%. A Reliability Analysis performed on this scale yielded a Cronbach's Alpha of .69.

[48] The individual items were combined to form a 6-item scale of political involvement. A Reliability Analysis performed on this scale yielded a Cronbach's Alpha of .64.

Job Assistance Program	"Would you strongly support, somewhat support, neither support nor oppose, somewhat oppose, or strongly oppose a new job assistance program that would provide $3,000 to unemployed workers to use for job retraining, child care, moving costs, and other costs associated with finding a job.

APPENDIX H

STUDY 3: DESCRIPTIVE STATISTICS

TABLE H1. Descriptive Statistics for Independent Variables in Study 3

Variable	Mean	St. Dev.	Minimum	Maximum	Range
Dependent Variable					
Perceived Importance of the Economy	4.15	1.24	0	6	6
Moderator Variables					
Personal Characteristics Scale	13.82	6.44	1	30	29
Integrity	3.38	1.41	0	6	6
Compassion	2.38	1.63	0	6	6
Intelligence	2.46	1.66	0	6	6
Vision	3.41	1.58	0	6	6
Charisma	2.20	1.79	0	6	6
Presidential Approval	2.78	1.70	0	6	6
Partisan Identification	3.13	1.96	0	6	6
Ideological Orientation	2.55	1.48	0	6	6
Political Knowledge Scale	2.58	1.11	0	5	5
Partisan Control of the House	0.69	0.47	0	1	1
Which Party is More Conservative?	0.54	0.50	0	1	1
What Job is Held by Dick Cheney?	0.53	0.50	0	1	1
Who determines if a law is const.?	0.75	0.43	0	1	1
Majority required to override veto	0.65	0.48	0	1	1
Political Attentiveness Scale	8.95	5.12	0	29	29
Interest in politics	1.57	0.89	0	3	3
Discuss politics with friends/family	1.53	0.81	0	3	3
Days watch national network news	1.35	1.54	0	7	7
Days watch 24-hour news channels	1.90	1.98	0	7	7
Days read about politics in paper	1.94	2.01	0	7	7
Days listen to politics on radio	0.66	1.30	0	7	7
Control Variables					
Prior agenda	0.37	0.41	0	1	1
Income	3.28	1.51	0	5	5
Tax Cuts	0.65	0.48	0	1	1
Unemployment Benefits	1.58	0.71	0	4	4
Job Assistance Program	1.46	0.67	0	4	4

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