# The Effects of Extreme Media on Political Behavior, Attitudes, and Media Selection 

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# THE EFFECTS OF EXTREME MEDIA ON POLITICAL BEHAVIOR, ATTITUDES, AND MEDIA SELECTION 

by

JAMES BENJAMIN TAYLOR

Under the Direction of Sean Richey


#### Abstract

This dissertation examines the role of extreme media (i.e. political talk radio and cable news opinion shows) on the political attitudes of viewers and listeners. I investigate whether extreme media has both positive and negative externalities for democratic citizenship. Specifically, I use laboratory experiments, national survey data, and qualitative interviews to test the impact of extreme media on viewers' political knowledge, trust in government, efficacy, and political tolerance. I use laboratory experiments in controlled settings to uncover the


impact of viewership on political knowledge, trust in government, and efficacy. I confirm these lab findings with the national survey data, by using propensity score matching and ordered probit models to demonstrate that exposure to extreme media produces political knowledge and efficacy, but decreases trust in government. I further use process tracing to ascertain the motivations individuals use to choose to view extreme media. Finally, through subject interviews conducted as part of the self-selection portion via a $1 \times 3$ self-selection experiment, I find subjects seek out entertaining media specifically from ideologically similar outlets. This project advances the media and politics literature by demonstrating the capacity for extreme media to alter political behavior, attitudes, and information processing.

INDEX WORDS: Media effects, Political behavior, Political knowledge, Political science
by

## JAMES BENJAMIN TAYLOR

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy<br>in the College of Arts and Sciences<br>Georgia State University

2013

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by

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Office of Graduate Studies
College of Arts and Sciences
Georgia State University
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## DEDICATION

I dedicate this dissertation to all those who have made me the person I am today. I would thank them all by name, but I would surely miss someone. Specifically, I am the person I am today because of my parents, Jimmy and Susan Taylor. They taught me what it means to be responsible, and how to be a good person. Additionally, I would like to thank my grandparents, Harold and Linda Scott and Jamie and Wadene Taylor. You all showed me the way you are supposed to live a good life. I would also like to thank my wife, Sarah. Without her understanding and support this degree could have never been accomplished.

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## LIST OF ABBREVIATIONS

- ADA - Americans for Democratic Action
- ATT - Average Treatment Effect
- MSNBC - Microsoft-National Broadcasting Company
- NAES - National Annenberg Election Study
- NES - American National Election Study
- PBS - Public Broadcasting Systems
- PCA - Principle Component Analysis
- PTR - Political Talk Radio
- QM - Quinn-Monson
- ROC - Receiver Operator Characteristic
- SB - Senate Bill


## CHAPTER 1

## INTRODUCTION

### 1.1 Media in the United States

Media are an integral part of American politics (Cook, 1998). Indeed, the framers of the Constitution were adamant that a free press be an essential aspect of their new republic (Cook, 1998; Schudson, 2002). It is important to note that the framers were concerned with a free press, as opposed to an objective press. There was not then, and is not now, any requirement that the media be objective. As media evolved out of the 19th Century's era of partisan press the "norm of objectivity" was developed and advanced by schools of journalism, which were also increasing in number and size into the 20th Century (Ritchie, 1998; Schudson, 2001). Thus, the prevailing position at this time is for media to fulfill their role as the facilitator of knowledge in a democratic society, the information they provide should come from an objective position (Graber, 2004; Jamieson \& Cappella, 2010; Schudson, 2001).

Objectivity is important for a two reasons. First, within the norm of objectivity, the emphasis is on the distribution of information rather than analysis (Schudson, 2001). Reporters are nothing more than conduits through whom information travels, and any normative implications derived from the information are provided by the consumer for themselves or by the editorial person or staff of the news outlet (Graber, 1988; Schudson, 2002). ${ }^{1}$ The second reason objectivity is important-building off of the first-is consumers can trust the information they receive because they know the information is objective and fully vetted for

[^0]accuracy (Graber, 1988; Schudson, 2001, 2002). Theoretically, the ability to immediately trust the information one receives should allow for quicker internalization and use for making political decisions. Fundamentally, objectivity should help citizens to be better informed, and it should help them make better, more accurate decisions for themselves.

The norm of objectivity is a distinctly modern phenomenon (Cook, 1998; Schudson, 2001). Despite the fact schools of journalism and industry practices both developed and continue to advance the norm of objectivity there is increasing evidence the norm may be eroding (Schudson, 2001). This erosion is cause for concern if the claims of objective journalism and news reporting being the catalyst for normatively beneficial outcomes like political knowledge and trust in government are, in fact, true. Political talk radio (PTR) is continually blamed for being part of an "echo chamber" that neither informs nor produces positive political action (Jamieson \& Cappella, 2010). One of the reasons PTR is supposedly so problematic is its distinctly non-objective information dissemination. Hosts on PTR outlets use their personal biases to present information to their listeners which may skew the amount of objective information their listeners encounter (Barker, 2002). These same accusations are currently being leveled against other burgeoning opinionated news forms such as personality-based news shows on evening cable news channels (see Sobieraj \& Berry, 2011).

The growing concern about non-objective news raises a question: Is it true that opinionbased news shows - on both television and radio - are not as able as more traditional forms of news to produce the kinds of benefits democratic societies require? The lack of objectivity in some areas, contrary to the positions of some, need not imply that media are no longer able to perform all their important democratic functions. Indeed, it may the case that non-objective media, with a distinct point-of-view, are able to attract viewers who might otherwise not engage with news of any sort. We know that this happens with soft news (Baum, 2003a, 2003b), and that the information soft news viewers get is beneficial in terms of increased political knowledge (Baum \& Jamison, 2006a). What has not yet been investigated are the ways non-objective cable news programs may encourage these same benefits such as political
knowledge, political trust, efficacy, or political tolerance. If it is the case that non-objective media are able to produce desirable attitudes and skills like increased political knowledgeor at least they can do so just as well as traditional media - the concerns some have raised about non-objective media may be eased. However, missing from the discussion to this point is the capacity for media to affect attitude change at all.

### 1.2 Literature on Media Bias

The literature on media and their role in American politics is a well-worn area of study. The evolution of the literature begins with the debates between Lippmann (1922) and Dewey (1927) who debated the role and capacity of citizens in democracy. Lippmann claims that media support the power structure with propaganda, while Dewey argues that media and technology have a educative capacity over time. Others argue that, in fact, the LippmannDewey debate places too much emphasis on media. Media effects on vote choice or opinion generally are minimal (Berelson, Lazarsfeld, \& McPhee, 1954; Klapper, 1960). The fundamental reason media have minimal effects is due to selective exposure and cognitive dissonance (Festinger, 1957; Klapper, 1960). However, others claim the effects of mediato the extent there are any-happen on the margins, and occurs at different rates depending on education or attention to media (Graber, 1988). This dissertation proposal sides with this third view; media effects are real, but they are present under specific circumstances. This should be particularly so with the type of media investigated here: extreme media.

Extreme media are likely to elicit stronger reactions than mainstream media, but psychological processes (i.e. dissonance and/or motivated reasoning) will mitigate some effects of these extreme media. However, because extreme media are also likely to produce affective reactions as well, individuals who are confronted with extreme media will be affected by the content subtly. For instance, it is highly unlikely that a liberal who watches Sean Hannity will become conservative; however, it might be the case that after watching Sean Hannity a liberal may distrust the government more than liberals who do not watch Sean Hannity. ${ }^{2}$

[^1]While the idea of biased media or the possibility that media can be biased is not a recent phenomenon (Cook, 1998; Schudson, 2002) research on the effects of these biased or extreme media are varied with regard to their results and conclusions. Furthermore, the definition of "bias" is debated in the literature, and there is limited-and now datedresearch on media outside of the mainstream. ${ }^{3}$ Dalton, Beck, and Huckfeldt (1998) show that mainstream media ${ }^{4}$ are balanced when covering presidential candidates, however, those who pay the least attention to politics are the most likely to perceive their candidate as having biased coverage. Dalton et al. (1998) claim that this is likely due to the "us vs. the media" frame used by modern presidential candidates. Baum and Jamison (2006b) also note the importance of attention with regard to soft media. They show that those who are less attentive generally are more likely to vote consistently (i.e. vote correctly (Lau \& Redlawsk, 2006)) when they watch soft news like The Daily Show or Oprah rather than hard news like the typical six o'clock news program. Prior attention and interest in politics and news, then, is a crucial aspect when theorizing about media effects.

While Dalton et al. (1998) research focuses on perceived bias, how might one measure actual bias and what effect does actual bias have on consumers? There are two types of bias outlined in the literature at this time. One is a negative-positive coverage bias (i.e., Dalton et al., 1998). The other type of bias in use throughout the literature is liberal-conservative bias, however, measuring this type of bias is done through proxy. Groseclose and Milyo (2005) and Ho and Quinn (2008) measure the bias of media. Groseclose and Milyo's measures are based on A.D.A. scores, which are calculated by taking the ideological position of the think tanks, interest, and policy groups cited by news agencies, and then cross-referencing those citations with the citations of the same groups by members of Congress. The result is an adjusted A.D.A. score that Groseclose and Milyo take as a measure of media bias. They

[^2]claim that all of the media outlets in their dataset are biased toward the liberal direction except for the Washington Times. Another measurement strategy is put forth by Ho and Quinn who measure the ideological position of newspapers using editorials and estimating Martin and Quinn (M.Q.) (2002)-like scores. Ho and Quinn use the M.Q. of the newspapers and match them to current Supreme Court justices, which enables a unidimensional space for placing newspapers' ideology.

There are three important points to make about these measures before considering new research in this area. First, the Groseclose and Milyo measurement is purely a proxy for the frequency of appearance by interest groups and think tanks. Secondly, Groseclose and Milyo look at organizations as a whole, while it is probably more important to determine who among the on-air talent is more or less conservative/liberal, and the extremity of their positions. The third point is that the Ho and Quinn measurement is looking only at newspapers. Newspapers, while certainly migrating to on-line content, are rapidly losing their position as the primary news source in American politics. Nonetheless, these measures successfully demonstrate that there is bias in media, and that these biases need to be taken into account when considering how media affect political behavior.

Beyond directly measuring bias, researchers have investigated the effect of clearly dissimilar news, and the types of individuals who select into those types of news (Prior, 2007). Selective exposure is an unavoidable in the current media environment in the United States (Iyengar \& Hahn, 2009). No longer do citizens choose from the "Big 3 " nightly newscasts, which were typically sharing the same information. Citizens can now choose from NBC, CBS, ABC, as well as MSNBC, CNN, Fox News, or myriad other news organizations high up the cable listings. ${ }^{5}$ Selective exposure research confirms that ideology is a significant predictor of selecting into media outlets (Stroud 2008). Iyengar and Hahn (2009) find that conservatives are significantly more likely to select into Fox News information. Using an experiment,

[^3]Iyengar and Hahn randomly assign Fox, CNN, NPR, or BBC brands to AP stories. In each treatment conservatives (or Republicans when used as the independent variable) selected into and believed the Fox News story at higher rates than non-Fox News stories. Iyengar and Hahn also point out this phenomenon is the reason MSNBC turned in an explicitly anti-Fox News direction in 2006.

The primary dependent variables in this dissertation will be political attitudes and qualities like political trust and political knowledge, but also evaluations of the content itself to understand how these clearly ideological media affect attitudes such as political tolerance. Political attitudes are - without question - supremely important for understanding how citizens behave in democracy. Research demonstrates that education, attention, and the type of media environment (i.e. television vs. newspapers) are crucial when modeling media effects on these dependent variables (Jerit, Barabas, \& Bolsen, 2006). More specifically, Jerit et al. (2006) find that those with lower levels of education learn more political information through television through an on-line learning process. The opposite is true for those with higher levels of education; they learn more from newspapers. Jerit et al. make a compelling case for differentiating expectations for political knowledge based on the information environment. More generally we know that political knowledge and political trust are important qualities that can be affected by media (Delli Carpini \& Keeter, 1996; Hetherington, 1998). Perplexingly, however, none of these traits have been explained using biased or extreme media as the independent variable. This dissertation will undertake that objective.

A primary aspect of human behavior is psychology. Human beings have myriad cognitive processes that affect information processing and learning. Two of these, cognitive dissonance and motivated reasoning, are particularly important when assessing learning via media. Cognitive dissonance theory is states that human beings ignore information that is dissonant to their prior held views but recall those that conform to their prior views (Festinger, 1957). Motivated reasoning is the process by which individuals rationalize new information to make it conform to those prior beliefs (Taber \& Lodge, 2006). Affect is important to these processes as well because each piece of information individuals encounter contains a piece
of affective information as well (Redlawsk, Civettini, \& Emmerson, 2010). Research shows that political beliefs are difficult to change, even when they are objectively wrong (Nyhan \& Reifler, 2010). However, over time, there can be an "affective tipping point" after which one will reevaluate their beliefs, but this tipping point has a long time horizon (Redlawsk et al., 2010). Despite these barriers to change, some research suggests that some media are able to affect opinions and values.

Kim and Vishak (2008) show that "soft news" or entertainment political programming is more successful than "hard news" or traditional political programming at facilitating political knowledge. Kim and Vishak claim this is the case because entertainment media encourage on-line processing, while traditional media encourage memory based recall (Lodge, McGraw, \& Stroh, 1989). Thus, Kim and Vishak, in addition to Jerit et al. (2006), Baum (2003b), and Prior (2007) all suggest that entertainment and traditional media can help citizens learn and affect attitudes. Mutz and Reeves (2005) and Mutz (2007) demonstrate that incivility on television can lower trust, but can encourage citizens to consider other viewpoints. This dissertation will add to this literature by adding the ways extreme media can affect citizens.

### 1.3 Outline of the dissertation

This dissertation is composed of six chapters, including Chapter 1 -the introduction. The second chapter is a qualitative analysis of the reasons individuals may select into their media choices. Recent research demonstrates that self-selection is a concern in the 21st Century media environment (Dilliplane, 2011; Prior, 2007; Stroud, 2010). Missing from these recent studies is an in-depth analysis of the motivations individuals have for choosing the media selections they do. Using a $1 \times 3$ self-selection design, I delve into the complex choices viewers make and the reasons for those choices. This chapter informs the development of the hypotheses in the following chapters.

In Chapter 3, I examine the degree to which political knowledge is generated via extreme media. The current state of the literature suggests that political knowledge would not follow from watching extreme media because it does not provide information in a manner conducive
to learning nor does it present information in a balanced way (Barker, 2002; Jamieson \& Capella, 2010; Sobieraj \& Berry, 2011). I challenge this assumption and demonstrate that, in fact, extreme media can produce political knowledge, and that they are at least as informative as more traditional news sources like PBS. I utilize experiments and crosssectional data to account for concerns with endogeneity and causality.

In Chapter 4, I address the effect extreme media have on political trust and efficacy. Like knowledge, there is a general-un-tested-assumption in the literature that extreme media will be detrimental to political trust (i.e., Barker, 2002; Jamieson \& Capella, 2010). Using propensity score matching on cross-sectional data across four presidential election years I successfully show that the effect of extreme media on political trust and efficacy is more nuanced than previously discussed. Furthermore, I am able to test the effect of different media-radio and television-on these dependent variables. I find that the macro-political environment is an important factor to take into account when thinking about how media affect trust and efficacy.

The last empirical chapter examines the effect of extreme media on political tolerance. Thus far, media effects on tolerance have shown mixed results. Given the emphasis on the possibly detrimental effects of extreme media, political tolerance is an attitude that should suffer if these media are normatively problematic. Using two different experimental designs, I find that tolerance is not significantly affected by extreme media. The remainder of this chapter is devoted to an explication of why these finding - though null-should instruct conceptualization of extreme media effects in the future.

I conclude this project with a discussion on the implications of the research contained in this document, and how these area of research should be continued in the future. Extreme media - as a genre - are new, so continually evolving theories to test and methods to use to study these media are important. I also place extreme media in context as an evolution of the partisan press that was so prevalent in United States' history. The fact is that those who seek to use extreme language and tactics to gain market share and spread their ideology are not as original they would like to believe; rather it is that our collective memories are not
good enough to remember a time before the golden age of the "Big 3" (Schudson, 2002). For too long scholars have painted with a broad brush when considering the effect(s) of these media. Like so many other areas of media effects, extreme media are nuanced in their effects across time and persons. The primary goal of this project is to highlight some of these nuances in the hope that the discussion about media of this nature can be advanced from its current position.

## CHAPTER 2

## THE DETERMINANTS OF EXTREME MEDIA SELECTION

### 2.1 Introduction

Why do people select the media they do? What are their reasons, and how do attitudinal characteristics play into their selection? These research questions are investigated with this empirical chapter. The need to investigate these questions is evident given the increasingly polarized media environment Americans currently inhabit (Prior, 2007). From the earliest literature on media in American politics, scholars have assumed that people choose media and information that reaffirms what they already know or think they know (Berelson et al., 1954; Klapper, 1960; Lazarsfeld, Berelson, \& Gaudet, 1948). This school of thought gave rise to the "minimal effects" hypothesis where media do not cause any effect per se but rather reinforce already held beliefs. Over time, the minimal effects hypothesis receded into the background as media effects expectations were honed and defined. In the intervening 50 years, framing, priming, and agenda setting literatures have shown media effects to be not only real, but robust (Graber, 1988, 2004). Yet, as media become more prolific in their capacity to be everywhere at all times, scholarship suggests we may be on the verge of a new minimal effects era (W. L. Bennett \& Iyengar, 2008a).

The culprit of this new era is self-selection (W. L. Bennett \& Iyengar, 2008a; Stroud, 2010). Fifty years ago, Americans had three television channels, each with their own news organization, but also competing for the same audience. Thus, even if one wanted to avoid the news it was almost impossible to avoid it completely. This is no longer the case. As Prior (2007), points out, depending on your television provider and media package one could watch news from around the world at every moment of the day, or one could watch cartoons from cradle-to-grave. The media environment is polarized, but it is also exponentially growing (Sobieraj \& Berry, 2011).

In this chapter I investigate the factors that predict self-selecting into extreme partisan media. I use a combination of empirical significance tests, as well as qualitative interviews with experimental subjects to investigate the deeper reasons behind the selection of extreme media versus non-extreme, non-partisan media. Using both an observational self-selection study and randomly assigned laboratory experiment with the same media, I show that there are factors other than partisanship that predict the media choices people make. This chapter demonstrates that psychological effects are also at work, which is a novel and heretofore untested aspect of the self-selection literature.

### 2.2 The Political Media Environment and Self-Selection

The American public find themselves in an increasingly polarized media environment (Prior, 2007). Polarization is problematic because it produces the capacity to select into media that confirm one's previously held worldview (Mutz \& Mondak, 2006; Prior, 2007). The result is a situation where conservatives select into conservative media, and liberals select into liberal media never having to hear the other side or encounter contrary opinions. However, this is not the first time the American political system has been coupled with an increasingly opinionated press. Indeed, until the 20th century, the American press was distinctly partisan (Schudson, 2001, 2002). The difference in today's more polarized environment is that citizens are increasingly isolated from one another in other ways as well, which means that society as a whole is becoming more polarized.

Americans are becoming more polarized ideologically (Abramowitz, 2010). As the ideological "center" of American politics shrinks citizens are looking toward their media to affirm their belief systems. Whereas at one time media could create an impersonal "other" to increase political tolerance (Mutz, 1998), today we see that social networks and media choice are becoming increasingly homogeneous (Mutz \& Mondak, 2006; Stroud, 2008). The development of "echo chambers" is thought to have a depressing effect on civic engagement (Jamieson \& Cappella, 2010). If citizens are not introduced to information contrary to their own beliefs they will not be compelled to act politically. Mutz's (2006) work on
social networks suggest this might not be the case as homogeneous social networks breed participation, while heterogeneous networks breed political tolerance and inactivity. These cross-cutting political attachments present significant challenges for political participation, and this is especially so in a polarized media environment.

There is not uniform commitment to the notion that selective exposure is a rampant aspect of American political behavior. Kinder (2003) states that people do not often seek out political information on the sole basis of partisan attachment or direction. Kinder takes on the notion put forward earlier by Klapper (1960) and Lazarsfeld et al. (1948) that citizens simply affirm the already held beliefs. In their localized surveys, Klapper and Lazarsfeld and colleagues note that self-selection is particularly an issue with newspapers. Graber (2004) highlights that newspapers are no longer the dominant source of information for most American citizens. Television has exceed newspapers, and - in fact - political talk radio is increasingly the source for millions of American's political news (Berry \& Sobieraj, 2011).

### 2.3 Observational Procedures

Assessing the reasons behind media selection is difficult. Survey responses could be biased in ways that may not reflect reality. Thus, I initiate an experimental environment where subjects are incentivized to choose their media choices similarly to real life. This study is conducted with a convenience sample of American Government undergraduate students at a large southeastern research institution. In total, 194 students participated in return for extra credit on their final exam. These subjects were told they would be part of a research study that would take place online, and that they would need a good internet connection.

When subjects entered the environment they were asked to answer a series of political opinion, attitude, and demographic questions. Once they completed those questions, they were then prompted to take a break. After their break, they were instructed that they should read the next screen very carefully. The screen informed participants that they would get a portion of their extra credit just for participating. However, to get their full extra credit they would have to select a media choice and answer questions correctly after viewing their
media selection. This was done to incentivize the subjects as they might be incentivized in real life. This also follows other research that primes effort to mimic real-life pressure to make good choices in elections or informational choices (i.e., Lau and Redlawsk 2006). Subjects were offered three media choices. They appeared on the screen in the following manner, "MSNBC: Countdown with Keith Olbermann," "FOX News: Glenn Beck," and "PBS: NewsHour with Jim Lehrer." These media personalities were chosen because of their ideological direction. Countdown with Keith Olbermann is a distinctly liberal show, Glenn Beck is a distinctly conservative show, and NewsHour with Jim Lehrer is shown to have no discernable ideological orientation or bias (Dilliplane, 2011).

The primary purpose of this chapter is to investigate the reasons behind the selection of certain types of media. Stroud (2010) and Dilliplane (2011) show compelling evidence that partisanship is a significant predictor of selecting into ideologically oriented news. What is less clear, however, is if people believe they will get good information from their choices. The literature, as previously discussed, suggests that citizens may be more interested in avoiding discordant information than gaining useful information through their selection (Taber \& Lodge, 2006). So, there is reason to see if people who select into these media truly believe that they are going to get the information they need to make the best decisions. Additionally, I test a series of logit models estimating the likelihood of selecting into media. I find that, in line with previous literature, partisanship is a significant predictor for selecting into conservative media, but not for liberal or non-partisan media.

### 2.4 Data

Table 2.1 contains a summary of the data. As demonstrated, the selection among the 194 subjects was distributed throughout the sample into nearly thirds.

Table 2.1 Self-Selection Subjects' Demographics and Ideology

| Variable | Beck (83) | Olbermann (63) | PBS (49) |
| :---: | :---: | :---: | :---: |
| Conservative | 27 | 4 | 9 |
| Moderate | 31 | 27 | 17 |
| Liberal | 24 | 31 | 22 |
| Republican | 24 | 4 | 7 |
| Democrat | 39 | 38 | 19 |
| White | 23 | 21 | 17 |
| Black | 42 | 32 | 17 |
| Latino | 13 | 10 | 8 |

### 2.5 A Qualitative Investigation of Self-Selection into Partisan Media

### 2.5.1 How to Choose in Light of the Objective?

The first question asked to subjects ${ }^{1}$ in their post-selection is, "Which video selection did you choose, and why did you feel that it would help you gain all of your extra credit?" There are discernable themes representing the answers to this question by each of the three groups. Those who chose the non-partisan, non-extreme PBS clip all point its non-partisan nature as the reason for their choice. For instance, one subject states, "The PBS one. Keith Olbermann and Glen [sic] Beck discuss the news in an openly biased way. It'd be more logical to receive news from a news anchor less concerned with advancing a particular ideology." This particular sentiment is echoed over and over again by those who selected into this choice. It is clear that there is desire for objectivity for those who selected into PBS, but what is important is that there is also a repository of knowledge about Olbermann and Beck being partisan. Highlighting this repository of knowledge about the other media sources, one subject says, "I chose the PBS video because it's a public station that usually doesn't have it's own agenda. The Glenn Beck video was definitely out of the question because the FOX network, as well as Beck, is very one sided and can be a bit extreme." This subject not only references their own desire for non-partisan news, but actually notes Beck as "extreme,"

[^4]which suggests more that just being partisan.
The desires of the subjects who chose FOX News are somewhat different than the subjects who chose PBS. There are almost no references to the purported objectivity of FOX News. One subject is clear in their preferences, "Being a Conservative, Catholic, Republican- Fox News would be my obvious pick. Watching Fox News, I would be move [sic] interested in watching the whole 3mins [sic]." This subject clearly knows that FOX News is ideologically conservative, and they know that they will get the information they want to hear from FOX News. Another expresses a similar opinion for their selections stating, "Fox news, and I felt that this media choice would help me gain all of my extra credit because I am a conservative Republican and Fox news has a tendency to view the news in a conservative way, which is what I support." These views are typical of the subjects who selected into FOX News in this study. The known ideological direction of FOX News is clearly a major motivation for those who are selecting into FOX News.

Like FOX News, MSNBC's Keith Olbermann also benefits from those who know the ideological direction of the host. Unlike PBS, where subjects were seeking objectivity, neither FOX News nor MSNBC selecting subjects mentioned objectivity. One subject who selected into MSNBC says, "MSNBC-although it leans to the left and can report some issues with biased opinions, I regularly watch MSNBC for my news. I have never watched PBS, and FOX news is just ridiculous." This subject notes the ideological slant of MSNBC-though they do not state liberal or conservative-and claims that they use MSNBC for their news most of the time. This subject does not mention objectivity as a requirement of their selection as those who selected into PBS did quite often. In this way, FOX News viewers and MSNBC viewers are similar, but with different ideological references. Another subject states, "Countdown with Keith Olbermann on MSNBC. I chose this media choice because Glenn Beck is a fool and too extreme for my political opinions, and PBS is boring. I like the middle ground, slightly leftist approach Keith generally takes." By highlighting both PBS and Glenn Beck this subject not only clearly explicates their knowledge that Olbermann is partisan, and that his being "leftist" is something desirable. One aspect of
these news programs that is left out of the self-selection literature, but is discussed in the "soft news" literature is the entertainment value of Beck and/or Olbermann. Baum (2003a, 2003b) suggests that Bill O'Reilly, who shares his genre with Beck and Olbermann, might be classified as "infotainment." This is something apart from hard or soft news, where the viewers tune in for a hard news-like program, but are also entertained in the process. One subject claims this is why they chose MSNBC by saying, "I chose the MSNBC video because that's simply what I'm used to watching. I know how biased Fox News is and I do not enjoy watching it. And although PBS is probably the most informative of the three, it's content is usually very dry and dull-not entertaining at all." The prompt for the selection was to get questions correct and earn all the possible extra credit, but even under these high-stakes instructions it seems that some subjects were unwilling to forego perceived entertainment on the way to being informed.

### 2.5.2 Was the Information Informative?

The second in-depth question asked subjects if they felt that the video they selected gave them the information they needed to answer the questions, and how they felt about the presentation of the information. In the PBS selecting subjects, there is a relative consensus that the presentation was "dry" or "boring." One subject states, "I felt the video was uninformative, maybe because of the delivery of the video. I am not into politics myself, so that may be another reason why the video was uninteresting. I do feel the video gave me a little information though." Of all of the PBS selecting subjects, this subject is the only one who mentions that the video was uninformative. However, even after stating that the video was uninformative - likely due to its "boring" delivery - they close by saying that they did obtain "a little information." Other than this one subject, the general theme emerging from these responses is that PBS is informative, if somewhat dry, and useful.

Subjects' judgments of usefulness of FOX News's Glenn Beck are somewhat more mixed than PBS. Where PBS was almost uniformly considered informative but uninteresting, Beck is noted as entertaining by a number of subjects. A subject states, "it [Beck] was quite
entertaining not really informative." Along similar lines, another subject says, "I felt that the media choice i [sic] chose was informative, but the humor was a little bit more emphasized than was the actual facts of the news story of what was happening in Arizona." There is some evidence that using humor or engaging in entertainment generally is good for helping people acquire information (Kim \& Vishak, 2008). In his clip, Beck goes into detail with the text of Senate Bill 1070 and discusses how the bill can only be considered harmful if one plans on doing pernicious activities in the first place. He frames his support of the bill as a law-and-order or support of police frame. One Republican-identifying subject claims that this was helpful and informative claiming, "Yes. This video informed me a lot. It explained why everyone who thought is was wrong was misinformed." Beck's explanation of the issue is perceived to be one sided, but this does not appear to take away from the perceived effectiveness of his clip. A statement by an ideologically moderate Democrat shows the ways ideology and partisanship might affect who subjects interact with the information. On the question of usefulness they state, "somewhat, he [Beck] was single sided and only explained one side of the issue." There is a clear divide between those who felt Beck's presentation of information on Senate Bill 1070 was useful. Conservatives felt that Beck's delivery was useful, while those who were moderate or identified as Democrats generally had more negative comments. Almost no liberals selected into Beck, which follows the previous literature on self-selection (Dilliplane, 2011; Stroud, 2008). However, of the few who did, their comments mirror this slightly liberal male's comments,

Like I already answered in the previous answer, the show [Beck] gets pieces of what the president said reinforcing negative information for the president. Their [sic] might be lots of reason for that, but the main one is because they are trying to push you towards picking a republican candidate. Now, it could also be that the president also knows that their [sic] is corruption and it actually happens with the example of immigrants being coerced by cops if they are buying ice cream, but since those immigrant probably don't even know they have personal rights and liberties they don't speak or fight it in court. I felt as if the show was
somewhat informative, but not all details described.

This person obviously feels that the show is informative to a degree, but-as a liberalfeels like there is important information left out, and does not like the framing of the issue generally. Yet, even here with this hard case, Beck is still considered somewhat informative.

As demonstrated in the summary statistics table above, this convenience sample of college students is generally liberal. This means that, on the whole, we should see more uniformity on the informative nature of the MSNBC Olbermann clips. The general consensus establishes that to be the case. Of the 63 people who selected into MSNBC, most of them felt that Olbermann's portrayal of Senate Bill 1070 was informative, and gave them the information they thought they would need to answer the questions correctly. A moderate who selected into Olbermann felt that his portrayal of Senate Bill 1070 was very fair saying, "I feel the media choice I made gave me the information I needed because it displayed a controversial topic and demonstrated a positive, less biased opinion on the topic of the Senate Bill 1070 in Arizona." Yet, there were some who felt like Olbermann had an emotionally driven frame to his reporting. One subject states, "It wasn't unnecessarily uninformative, because it was emotionally charged, which took away from actually learning information." This comment elucidates the fact that-like Beck with humor-Olbermann seeks to engage his viewers in affective states that will keep them viewing his show (Sobieraj \& Berry, 2011). The literature of affective intelligence is mixed with regard to which emotions producing higher learning states or inhibiting them (Brader, 2006; Lau \& Redlawsk, 2006; Redlawsk et al., 2010; Taber \& Lodge, 2006). Even among those who though that Olbermann was informative, there is still a perception of bias. A liberal Democrat says, "I thought it was really informative, but bias [sic]." The claims of bias for both Olbermann and Beck abound, but they do not seem to significantly detract from the perceived usefulness of the hosts or the clips. Only when viewers are of opposing ideological directions to the host is there some indication that they video was uninformative.

### 2.5.3 Explicit Perceptions of Bias and Attitude Change

The third question asked of subjects was, "Do you feel that the clip was biased in any way toward one side of the immigration debate? Did that affect your opinion of the video or immigration?" This question is asked to gauge the degree to which subject felt there was explicit bias in the information provided. Furthermore, it is necessary to ascertain if their media selection was capable of changing their opinions about immigration. Opinion change is a multi-faceted cognitive process, but most Americans do not have very ingrained ideas about political topics in general (Page \& Shapiro, 1992; Zaller, 1992). However, it could be the case that opinions of ideologically opposing view-of the few who selected into ideologically opposing hosts - may resist opinion or attitude change. In fact, they may experience "anchoring" where they become more ardent in their previously held beliefs (Nyhan \& Reifler, 2010).

On the question of explicit bias and opinion change there is a large degree of uniformity in the answers provided by the subjects. On PBS, a significant amount of objectivity is perceived according to the responses to this question. Subjects note that PBS attempted to give both sides of the issue (pro-immigration and pro-S.B. 1070) a fair platform from which they could share their position. A moderate Democrat who selected into PBS states,

Not really, it seemed pretty fact-based, rather than bias-driven. It showed the Republican Governor's point of view, as well as the President's. I wish it had included some more about local opinion in Arizona, but for a four minute clip, it was pretty fair. It didn't especially affect my opinion one way or the other.

Highlighting the facts and the even-sided nature of the coverage on PBS, this subject feels as though their opinion is unchanged by the clip. The overwhelming majority of subjects claimed that their opinions were not changed by the clips. This confirms the hypothesis stemming from the self-selection literature that people do not select into media in an effort to change their opinion. Even in the event that they find information that is contrary to their opinion they are able to convert it into information that helps maintain their previously held
beliefs (Taber \& Lodge, 2006). However, among those who selected into PBS with the most polarized ideological or partisan perspectives, even PBS is not outside the purview of "bias." A strongly conservative Republican says of their PBS selection, "I actually felt that it had a bit of a democratic/liberal [sic] bias but that might only be because I am a republican [sic]." However, strong liberals felt similarly, but in the opposite direction. A liberal Democrat says the following of the PBS clip,

It was biased more on the Republican side if immigration and did not show much of the Democratic side. So, I was lead to take the opinion that this Bill was a good idea with very few faults, when there might actually be a better way of figuring out how to work with the US, and Arizona, illegal immigration problem.

These comments from the ideological extremes demonstrate the ways the exact same information, understood through different ideologically driven cognitive processes, results in wildly divergent understandings of the bias of media. Taken with the earlier quote from a moderate, we see that establishing bias in even an objectively non-partisan source is a slippery slope.

Unlike PBS, FOX News's Glenn Beck and MSNBC's Countdown with Keith Olbermann are decidedly more partisan. Regardless of the subject's ideological orientation, there is universal agreement that Beck was biased toward the Republican bill and that Olbermann is biased against the bill. Both of these positions would match their ideological perspectives. A Republican moderate, for instance, states, "Yes I feel it was a little biased. I think that Beck favored the law, he sees it as something that is fair and does not really harm the people and that it is not unfair. This did not affect my own opinion." This person is of the same partisan orientation as Beck, but is able to pick out the bias in Beck's statements. They also claim that their attitude is not changed. Another Republican subject states,

Yes, the video clip did have a conservative bias supporting the fact that immigration papers are rarely checked anywhere in the United States and should be. This only strengthened my opinion about the law because I am a Republican and support news that has a somewhat conservative bias.

This statement shows that Beck was able to reaffirm the previously held belief of the subject, and that the subject viewed Beck as bringing out facts and truth.

Liberals who selected into Beck also claim their attitude is unchanged after watching the clip, but this is likely for a different reason. One liberal claims, " $[\mathrm{Y}] \mathrm{es}$, the video was very bias [sic]. [T]he video focused more on law enforcement decision and justification for those decision. As a liberal I have to go with the side of humans' right [sic], and discrimination is clearly at play for who the police officers choose to investigate." This subject references the fact that Beck suggests the only way Senate Bill 1070 could go wrong was if the police are totally irresponsible. Again, his is a law-and-order frame used to justify the expanded power for police. Even moderates catch on to this frame and suggest that it is biased toward the bill. This moderate Democrat says of Beck's frame, "Slightly biased because just because authorities say they won't ask for papers from an individual without prior breaking the law in some way does not mean that all authorities will go by the books and abide at all times." Obviously, Beck's insistence that the law is justified because we can trust the police does not abate concerns this subject may have; although, they claim that his presentation is only "slightly biased."

Claims of bias are also leveled at MSNBC's Olbermann. Once again, as with Beck before, I expect that ideologically like-minded subjects who select into Olbermann will not have their opinion changed, nor should ideologically opposed individuals. This is because of cognitive dissonance and motivated skepticism (Festinger, 1957; Taber \& Lodge, 2006). The following statement is from a strong liberal Democrat, "Yes, it [the clip] was biased against the anti-immigration bill. It did not affect my opinion because I expected that reaction from this news source." This person knows that Olbermann is the person they want to use as their source for information because they know what to "expect." As a liberal, they likely knew that he would feed their affective need to be reaffirmed. Furthermore, their opinion was unchanged because it was merely reaffirmed. There are a host of other liberals who answered similarly for this question. Like conservatives with Beck, liberals knew what to expect with Olbermann and went there to get it. On the tone of the clip, a moderate

Democrat had this to say,

Yes, the news swayed more towards the liberal's point of view. The information they showed about the conservatives made the conservatives look horrible and selfish individuals. The liberals on the other hand were viewed as more of a likable [sic] individuals. I'm already against the Arizona act before viewing this video, so my opinion didn't really change because of it.

This person is not strongly ideological, but did identify as a Democrat. As demonstrated by their statement, they were already against the immigration bill when they selected into this clip, and did not have their opinion change. Clearly, however, they detected a bias in the information, as they say that conservatives are made to look "horrible" and "selfish." These subjects' statements are indicative of the previous literature on self-selection, but give a more in-depth understanding of how people interact with these media. The bias is clear, and people recognize it. However, because of their cognitive defenses they are able to categorize the information and use it to buttress their own position. The same goes for conservatives who selected into Olbermann.

Of the few conservatives who selected into Olbermann, one has this to say about his perceived bias and opinion change, "No, and no I still believe that we should protect our borders." This person was the only strong conservative to select into Olbermann. They do not claim to perceive any bias, but that is likely because Olbermann's clip presented both sides of the argument. However, as the other slides note, he did so in a bias tone, so this may be the result for this subject not perceiving distinct bias. However, on attitude change, we see that this strong conservative believes that America should "still protect our borders." Thus, even though Olbermann takes a distinctly anti-S. B . 1070 point of view this subject's opinion remains unchanged. This fits with the previous discussion of both the other clips and the existing literature.

### 2.5.4 Examining Affect toward Extreme and Non-Ideological Media

The last question asked of the subjects was, "Finally, please describe your feelings toward the host(s) in your video clip in how they approached and discussed this topic. Were they able to inform the way you think about this issue?" The reason for this question was to probe deeper into the effect on affective judgments of the hosts by the subjects. Having already discussed if they though the host was informative or biased, I wanted to see if viewing these hosts and then answering questions about what they watched resulted in more or less positive judgments about the hosts. It is expected, as previously discussed, that ideological alignment will make the judgments more positive, while selecting into a dissimilar ideological host will create a negative reaction. PBS will have neither positive nor negative affect because it will likely be perceived as less entertaining, but-as noted earlier-more informative.

The impressions subjects had about the PBS host were positive based on the host's moderate, fair manner. Subjects pointed to the two-sided presentation of Senate Bill 1070, and how it was treated as a legitimate piece of legislation. Though, some took issue with the tone of the piece. A slightly liberal Independent who selected into PBS stated, "He was kind of boring but gave the news and facts as he should." This sentiment is echoed by another subject who said, "I honestly found it boring and therefore had trouble remembering some of the information." Despite these subjects who thought that the show was uninteresting, some subjects appreciated the calm discussion on PBS. A liberal Democrat who selected into PBS says,

I felt informed, but not necessarily that the speaker had any influence over my emotional response to it. It felt like a dull class lecture, honestly, which, I suspect, is part of why less people watch PBS than watch other news outlets. It's less biased, but also less interesting. They discussed it mildly and politely, and were clearly geared toward being informative, rather than biasing the viewer one way or the other. I appreciated that, even if I would have preferred to read the information than watch it.

This person suggests that the delivery made it more difficult to concentrate on the issue at hand. They appreciated the non-biased nature of the clip, but might have enjoyed more entertainment along the way. This impression of the fairness of the host is seconded even by a conservative Republican who states, "The gentleman presiding over the PBS selection handled the immigration debate in a very fair, moderate manner. The topic was discussed very professionally and informed me more about the issue." Regardless of the ideological direction of the subject, the PBS selection is considered informative, if forgettable. This is not the case for either Beck or Olbermann.

Both Beck and Olbermann were considered entertaining by the majority of the subjects who selected into their clips. This adds another layer on top of Beck and Olbermann as reasons for their success with their audiences. On top of being informative, they are also entertaining. A moderate Republican says of Beck,

The host [Beck] made the news a little bit more entertaining because he was humorous and funny as he covered the information. Rather than standing on camera and giving a boring lecture about the news, he made it much more interesting. Yes, they were able to inform the way I thought about the issue presented in the news, and supported the way I viewed the issue.

Once again, we see that this like-minded partisan appreciates the way that Beck affirms their worldview, but at the same time appreciates his delivery of the information. This is important because research is emerging that claims entertainment is a key component to increasing knowledge in polarized media environments (Kim \& Vishak, 2008). Other conservatives confirm this point with one stating, "I like Glenn Beck and listen to him regularly, so the way he approached the topic was in line with my conservative beliefs anyway. He was able to inform me the way I think about the issue." Even among liberals, Beck was considered at least mildly entertaining. One somewhat liberal subject says, "The host was very extreme and passionate about the topic of the immigration law. He was able to inform me the way in which I think about this issue." This statement puts very simply that the subject was able to learn something, and it can be inferred that they found Beck at least
somewhat entertaining because he was "passionate." They also say he was "extreme," but do not indicate that this was a problem for them. Other liberals were not so kind.

One slightly liberal subject said Beck "seems like a jerk." Another moderate Democrat had this to say about Beck's presentation,

He started off the show horribly in my opinion because he immediately attached Obama who is our nation's leader. He did not inform me well on the issue but tried harder to keep my attention by bending the truth and making it a joke.

It is clear from these comments, which are not bountiful, that there was some ideological resistance to Beck's "entertainment" as perceived by conservatives. However, at a minimum, there is compelling evidence that Beck was considered more entertaining that PBS, and he was considered by a majority to be informative as well. This suggests that Beck is able to tap into some affective reserve among his viewers to keep help them understand political issues.

Olbermann, too, seems to be able to tap into an affective well keeping his viewers entertained and informed. A strong liberal who selected into Olbermann says the following about his clip, "I felt that he was trying to be more entertaining than informative but he expressed the way I think about the issue." Responses to this question for Olbermann are not as universal in their agreement about the entertainment factor as they are for Beck. This may be due to Olbermann's more "news-like" presentation of information, but it may also be an artifact of the video treatments in this project. Nonetheless, even moderates felt that there was some entertainment value to Olbermann with one stating, "I really enjoyed the way the information was presented and the presenter, it was easy for me to understand." Some subjects did express dismay at the presentation of the Olbermann segments with one moderate stating,

They were able to inform the news, but obviously the news is biased. If I want to genuinely know about the Arizona law debate, I must go through the controversial topic and do thorough research on the topic. That way, I can have my own opinion
and know the information from both sides of the political party's point of view instead of relying on just one. The anchor obviously approached the republicans [sic] as ruthless and evil, so I'm not going to truly rely on every word he states. The republicans [sic] were only shown in a negative matter and the context of what they showed was obviously biased as well. Due to that matter, I cannot trust the news entirely.

Overall, both Beck and Olbermann are considered more "entertaining" with those who selected into Beck mentioning it most often. The PBS clip was considered informative, but the feelings toward the host were largely not mentioned, or they subjects said that they felt neither good nor bad about the host. Beck and Olbermann are more effective at getting emotional responses from the subjects in this study, which suggests emotion is one way they are able to get their viewers' attention. Those who took issue with the presentation of either Beck or Olbermann did so from a position of either ideological heterogeneity, or they wanted more information in the video.

### 2.6 Conclusions

This chapter delves into the reasons behind self-selection into extreme political media versus non-partisan media. The literature on self-selection suggests that partisanship is a significant predictor of media selection. This study replicates that finding, but also probes the subjects of this self-selection study to see what their objectives for their selection is. By priming subjects to select based on an informational goal, mimicking real-life, I am able to explore the quality of their decisions and the reasons behind them.

For Beck selectors, being conservative is a significant predictor, and entertainment is a quality continually referenced post video exposure. Beck is also considered to be informative, even among non-ideologically aligned viewers. His conservative bias is obvious, and is the source of enjoyment for ideologically homogeneous selectors, but aversion for ideologically heterogeneous selectors.

For Olbermann selectors, there is no significant ideological or partisan predictor based on
logit models, but more liberals and Democrats select into Olbermann than not in this study. Olbermann's liberal bias is noted by his selectors, but is referenced as one of the reasons the select into his video. Finally, his entertainment value is not a prevalently mentioned as Beck's but he is clearly more entertaining than the PBS clip. Most of his selectors also feel that he presents information in a way that allows them to recall it later with ease.

The subjects who selected into PBS noted its non-partisan, moderate reputation as one of the primary reasons most of them selected into this choice. Most participants said they believed the information was fair and not biased, but also described it as boring or unmemorable. Unlike the selectors to Beck and Olbermann, PBS was not effective at eliciting emotional responses to its coverage of Senate Bill 1070 of Arizona. Theses descriptions of PBS follow what the literature suggests is the case with this media outlet.

We now have a more in-depth understanding of the reasons and effects behind media selection in the American political context. This study finds that, similar to previous research, partisanship is a significant predictor for selecting into conservative media, but not for other media. Neither PBS nor MSNBC selection were significantly predicted using attitudinal variables. Liberals seem to select MSNBC more, but not significantly more than PBS. Importantly, this research suggests that emotional or affective dispositions are at play when subjects consider the effect these media have on them. Furthermore, subjects seem convinced that these media do not affect their attitudes toward immigration.

## CHAPTER 3

# THE BENEFICIAL IMPACT OF EXTREME MEDIA ON POLITICAL KNOWLEDGE 

### 3.1 Introduction

Do "extreme" media produce political knowledge? Political knowledge is paramount for democracy because the political knowledgeable are more engaged and make better decisions (Althaus, 1998; Delli Carpini \& Keeter, 1996; Gilens, 2001). This is an open question, but one that is vital to answer. By the term extreme I mean those media using hyperbolic language, ad hominem attacks, and generally bombastic confrontations to discuss politics (Sobieraj \& Berry, 2011). ${ }^{1}$ In this chapter I use both a laboratory experiment and an ordered probit models on cross-sectional survey data to test the hypothesis that extreme television media can generate political knowledge. For the experiment, I find that extreme media treatments are positive and significantly correlated with increases in surveillance political knowledge on immigration against a control group, and that these extreme media are at least as informative as more traditional media such as PBS. Using the cross-sectional data for external validity, I demonstrate that even while controlling for known predictors of political knowledge and the partisan slant of media outlets and hosts, extreme media are positive and significantly correlated with higher levels of civic-based political knowledge. This relationship persists even when testing for partisan slant of the extreme media host. Television is not the only medium with extreme political outlets, however, as political talk radio is likely the medium with the most extreme hosts and content. To expand my finding to media generally, I use American National Election Study and National Annenberg Election Survey data to

[^5]perform propensity score matching models with political talk radio as the treatment and political knowledge as the dependent variable. I find that political talk radio as a treatment is significant for increased knowledge in three of four elections.

Recent scholarship suggests that "outrage" or extreme media are normatively bad for American politics (Berry \& Sobieraj, 2011; Sobieraj \& Berry, 2011) and that they are on the rise. Berry and Sobieraj (2011) claim that stations using political talk radio-a platform that is classified almost uniformly "outrageous" or extreme-as their main format have increased dramatically in the last 5 years (Sobieraj \& Berry, 2011). Additionally, Berry and Sobieraj (2011) find that extreme political television content is growing exponentially as well. It is suggested that the reason for this growth is easy, low-cost production, and Americans' desire to discuss politics. In Post-Broadcast Democracy, Prior (2007) finds that increases in media choices have affected the ways people access their news and information, and therefore their behaviors as a result. Prior claims that differences in knowledge acquisition are exacerbated by media polarization essentially making those who knowledgeable know more while those who are unknowledgeable increasing less knowledgeable. Thus, the question becomes if Americans are given increasing choices of political media coverage that are extreme in nature, do these media actually produce a public good in the form of political knowledge?

Scholarship about new approaches to news and media affects is producing new paradigms in media studies (Hansen \& Kim, 2011). Researchers using theories developed from traditional media are comparing new types of media such as hostile media, soft news, and blogs (Baum, 2003a; Berry \& Sobieraj, 2011; Hansen \& Kim, 2011; Sobieraj \& Berry, 2011) to investigate the validity of these theories in today's media environment. As media evolve, this is an important task. If a new type of media-such as opinionated, extreme television talk shows-changes how citizens interact with information about politics it has important normative and policy implications.

This project fills a gap in this line of research. I posit that extreme media can positively affect knowledge both directly and indirectly. The direct effect comes through extreme media's constant discussion of political topics, which leads listeners to become more informed
on basic political matters (see Baum, 2003a, 2003b; Luskin, 1990). Beyond this straightforward reason, there is a theoretical basis for an indirect effect through the creation of emotional-cognitive stimuli-chiefly, anxiety (Huddy, Feldman, \& Cassese, 2007) but also fear (Brader, 2006). Fear has been shown in the affective intelligence literature to promote information searching and the eventual learning of political facts. By discussing topics in ways that might encourage listeners fear and anxiety, extreme media may promote viewers to become informed. Thus, we can expect that viewers of extreme media will be more knowledgeable because extreme media hosts often elicit fear (see Brader, 2006; Sobieraj \& Berry, 2011). With these theoretical bases, I hypothesize that extreme media creates a positive externality in promoting political knowledge. I use the term "externality" because that is exactly what political knowledge is in this circumstance. For example, apiaries desire bees to make honey. However, the farmer next door receives the positive externality - an unintended by-product - of his plants being pollinated. Similarly, Glenn Beck's objective is to entertain and make profits, but I hypothesize that a positive externality is their generating a more knowledgeable citizenry.

### 3.2 Political Knowledge

Political knowledge is important for citizens because it shapes the ways in which citizens engage in politics and make competent decisions (Althaus, 1998; Delli Carpini \& Keeter, 1996; Gilens, 2001). Research clearly shows that citizens are both basically unknowledgeable, and have trouble learning about political issues (Converse, 1964; Delli Carpini \& Keeter, 1996; Zaller, 1992). Bartels $(1996,2005,2007)$ shows that citizens are often unable to piece the policy implications of their opinions on political matters, and thus that their low levels of political knowledge result in sub-optimal electoral outcomes.

There is little debate that political knowledge is a key component of democratic citizenship (Delli Carpini \& Keeter, 1996; Lupia \& McCubbins, 1998). There is a debate, however, about how the knowledge is structured. Delli Carpini and Keeter (1996) claim that knowledge of civic-based facts is a legitimate way to measure knowledge, while Lupia
and McCubbins (1998) typify those who claim that heuristics are enough to make citizens knowledgeable even if they cannot recall specific facts (see also Popkin, 1991).

There is a "middle ground" of political knowledge that satisfies both sides of this debate: surveillance knowledge (Delli Carpini and Keeter 1996; Jerit, Barabas, and Bolsen 2006). Civics learning could be considered a political activity itself, which makes it a questionable metric for predicting political behavior. Additionally, heuristics can simply be wrong or misunderstood on the part of citizens. We should, however, expect that when citizens are presented with facts about current politics and policy that they would learn those facts. This happens primarily through media (Graber 2001, 2004). Surveillance knowledge is important because it is knowledge taken from the media environment and used to make political decisions. Thus, if a person watches a story on a current political topic, we would expect that person to be able to recall some factual information if media are doing their job. The question then becomes: do extreme media teach effectively?

One issue concerning knowledge acquisition through extreme, partisan media is that they may encourage or prime misperceptions about the policy they discuss. Misperceptions are demonstrated to be persistent in highly detailed policy areas (Kuklinski et al. 2000), and difficult to overcome (Nyhan and Reifler 2010). For example, research on Rush Limbaugh listeners in the 1990s suggests that they were more likely than non-listeners to have misperceptions about Clinton administration policy proposals (Barker 2002). Thus, extreme media are a likely place for persistent or exacerbated misperceptions.

### 3.3 The Capacity for Media to Teach

Because citizens know very little about politics generally and typically put little effort into researching it, a convenient and common place Americans get their information is the news media (Graber, 2004). Television is a common place for citizens to get their political information (Graber, 2001; Paletz, 2002). Baum (2003a, 2003b) demonstrates that even consumption of "soft news" television can increase political knowledge. Importantly, Baum and Jamison (2006b) show that this increase in political knowledge corresponds to real-world
political activity. Voters who consume soft news vote correctly at higher levels than similar voters who do not watch soft news.

Benefits from television are not uniform as this research highlights the discrepancies between the lowest and highest educated in society (Baum, 2003a, 2003b; Graber, 1988; Prior, 2003). Jerit et al. (2006) find that newspapers exacerbate differences in education levels with the highest educated being able to recall more surveillance knowledge. Less educated subjects are better able to use television to decrease the differences in knowledge between the highest and lowest educated groups (Jerit et al., 2006). Prior (2007) also claims there are issues with increased media polarization stating as media increasingly cater to niche markets any benefits generated by media will also be corralled in those niches. Those who consume extreme media, according to Prior, may be missing key pieces of information needed to make informed decisions or acquire knowledge. Importantly, despite the differences in treatment effects via media types, newspapers and traditional news media in these studies are generally able to increase knowledge over pre-test or control conditions. What is less clear, however, is if learning can happen in extreme media environments.

Learning can happen through extreme media because-in spite of the hosts' ideological predilections-discussions about policy and politicians constantly occur. Hosts like Glenn Beck, Sean Hannity, or Ed Shultz are often biased in their discussion, but they still discuss the most salient political topics of the day. For instance, on political talk radio-an entire medium based on extremeness (Berry \& Sobieraj, 2011)—personalities come from different ideological positions, but they talk about policy issues and members of Congress or who draw their ire. The healthcare debate in 2009 and 2010, for example, was the source of countless hours of political talk radio (Chefets, 2010). During this debate, citizens who would have otherwise never heard the names Nancy Pelosi, Harry Reid, or known anything about Congressional procedure (conference committees or "deem-and-pass") would have been confronted with these people and terms. Thus, while opinions may be affected in a negative way (see Barker, 2002), important political information is being dispensed to listeners. Currently, there is little literature on the substantive effect of extreme media-particularly
television - on political knowledge. Forgette and Morris (2006) test the effect of CNN's Crossfire - an early version of high conflict cable media-against CNN's traditional State of the Union broadcast on attitudes toward government officials and institutions. Subjects watching Crossfire have lower evaluations compared to traditional broadcast viewers. In short, consumers of extreme media have the motivation, opportunity, and the ability to acquire and process political information (Luskin, 1990). There is reason to believe that the effects of hostile media extend beyond attitudes toward the parties involved and extent to knowledge acquisition.

Consumers of extreme media may also learn through this medium because it heightens their emotional state through anxiety and fear. There is an increasing amount of scholarship about emotional learning in political environments (see Huddy et al., 2007; Marcus, 2002). While at one time reasoned, rational thought without emotions was considered to be the only method of political learning and decision making, it is now clear that emotions are important and perhaps necessary in decision making (Huddy et al., 2007; Marcus, 2002). Anxious citizens are more likely to seek out information to increase their knowledge on political topics. Psychologists demonstrate that emotions-specifically anxiety-can motivate people to learn and retain information. Damasio (1994) and Eysenck (1992) both demonstrate that anxiety can effectively motivate learning. Though anxiety can make learning less efficient (Eysenck, 1992; Lazarus \& Lazarus, 1994) it nonetheless encourages information seeking and attention.

Fear and anxiety are not the only possible motivating emotions. Positive emotions such as enthusiasm are also important for learning. Research by Brader (2006) on the 2004 presidential election outlines how the Bush campaign advertisements were able to produce both anxiety and enthusiasm. The results of these ads were that voters who viewed them were both motivated to learn more about the campaign, and remembered more of what they learned. Similarly, Marcus and Mackuen (1993) and Marcus (2002) find that positive emotions can play important roles in information seeking and retention in election settings. And since research shows that extreme media are often about creating anxiety or fear in
viewers (Sobieraj \& Berry, 2011), I expect a similar learning process to develop with at least some of the viewers.

### 3.4 Knowledge of Immigration Policy

In a laboratory experiment I test a salient policy debate to see whether extreme media can teach even when discussing policy issues. The topic discussed in the video clips shown in the experiment is the Arizona immigration law (Senate Bill or S.B. 1070) because immigration is a salient topic, but one that can likely discern between politically attentive and inattentive subjects. Furthermore, though aspects of this law were widely reported the elapsed time between the airing of the shows used here and implementation of the experiment is over one year.

Policy-specific knowledge is generally not well retained by the general public (Delli Carpini \& Keeter, 1996; Lupia \& McCubbins, 1998). Immigration also presents a good test for theories on information acquisition through extreme media because the hosts will allow their partisan predispositions to frame their coverage. A liberal host will frame the debate about the Arizona immigration law so that ideologically opposed subjects might be turned off and not learn any policy-specific information. Similarly, liberal subjects who watch conservative extreme media might be turned off of that host's frame as well. Therefore, there is a real chance that no knowledge acquisition occurs because subjects may not believe the information coming from an ideologically opposing figure (i.e., Taber \& Lodge, 2006).

Opinions about immigration are often built off of economic positions and fears about globalization (Brader, Valentino, \& Suhay, 2008; Citrin, Green, Muste, \& Wong, 1997). Additionally, proximity to large immigrant populations affects the ways Americans feel about immigrants (Tolbert \& Hero, 2001), as does education (Hood \& Morris, 1998) and ideology and partisanship (Citrin et al., 1997; Hood \& Morris, 1997, 1998). News media frames on immigration also demonstrate significant effects on opinions about immigration (Domke, McCoy, \& Torres, 1999; Dunaway, Branton, \& Abrajano, 2010). Domke et al. (1999), for instance, framed news stories as "material" or "ethical" and produce differences in attitudes.

Most studies about immigration focus on opinion change, so a notable omission in immigration research is investigating the ways media can increase political knowledge about this dense policy area. Sides and Citrin (2007) use an experiment to test the effect of new information about the size of the immigrant population in the United States on attitudes, but the primary finding is that citizens are simply unknowledgeable about immigration generally.

Immigration is a hard case to test information acquisition because that the ideological direction of extreme media personalities is known to their viewers and listeners (Morris, 2005; Stroud, 2008, 2010). There may be priming effects generating misperceptions associated with the presentation of content by these hosts. Research on misperceptions shows that even when confronted with information in an attempt to correct their misperception people will begin to anchor in their strongly held-but wrong-beliefs (Nyhan \& Reifler, 2010; Redlawsk et al., 2010). This study does not assess corrections per se, but will be able to test if extreme media exacerbate or prime misperceptions, which is a complaint leveled against them (Barker, 2002; Jamieson \& Cappella, 2010; Sobieraj \& Berry, 2011), but is as of yet untested.

### 3.5 Theory and Hypothesis

Research shows that media have the capacity to teach in some cases (Baum, 2003a; Delli Carpini \& Keeter, 1996; Graber, 1988, 2001; Jerit et al., 2006). Extreme media should also be able to increase political knowledge among those who consume these media. This theory builds off of Baum (2003a, 2003b) because one method for producing knowledge is to simply introduce citizens to information they might not otherwise encounter. This also comports with Luskin's (1990) seminal motive, opportunity, ability framework where consumers of extreme media meet all of these criteria for increase sophistication and knowledge. Additionally, extreme media also have the added effect of increasing viewer affective intelligence by emotional appeals and hyperbolic language (Marcus \& Mackuen, 1993; Sobieraj \& Berry, 2011). Thus, there are two pathways to knowledge via extreme media.

The first pathway to knowledge is the direct effect. This effect is, as previously stated,
garnered by media informing viewers on topics they might not encounter elsewhere. Thus, even in non-extreme versions of the same extreme opinionated news hosts learning should be present. However, given the added affective intelligence component it might be the case that information in an extreme environment might produce higher levels of political knowledge. This is the indirect effect. My formal hypothesis is as follows:

- Hypothesis 1: Viewers watching media will have higher levels of political knowledge than the control group.

These hypothesis are predicated on the preceding literature, but also highlight a gap in the literature. The effect of extreme media is still an open question. Though research is being done, as of yet there are no published studies expressly targeting the educational effect of extreme media as a group. This project fills that gap.

### 3.6 Data

Subjects were drawn in a convenience sample from a large research university in the southeastern United States. Subjects were randomized into one of three treatment conditions or a control condition where they were instructed to watch a video that appeared in an online environment. Subjects were college students in a mandatory class and were offered extra credit for their participation. The videos were hosted on YouTube so that they would approximate likely online viewing experiences. The control group watched a video of a bird which has been demonstrated in numerous experiments to not effect results in social science experiments. The treatment groups watched videos showing a clip of Glenn Beck as seen on FOX News or Countdown with Keith Olbermann from MSNBC, or a clip from the PBS NewHour program. Glenn Beck and Keith Olbermann were selected for the following reasons: 1) Beck and Olbermann are noted by Sobieraj and Berry (2011) as the most extreme hosts in their study period, and 2) both Beck and Olbermann have sufficient content on Arizona's immigration law. The PBS clip serves as the traditional media content control (Dilliplane, 2011). See Appendix A and Appendix C for a full transcript and table of specific topics
mentioned in each video.
Table 3.1 displays the pertinent demographic summary statistics for the subjects in the extreme media experiments. The subjects skew toward traditional college age, are somewhat liberal, are more likely to be women, and half the sample is non-white (Black/AfricanAmerican is the most common ethnicity among minority subjects). Based on $t$-tests, there are no significant differences between the treatment conditions. Randomization successfully balanced the subjects and unit homogeneity was achieved.

Table 3.1 Experimental Subjects' Demographic Summary Statistics

| Variable | Mean | Std. Dev. | $\mathbf{N}$ |
| :---: | :---: | :---: | :---: |
| White | 0.273 | 0.446 | 686 |
| Black | 0.423 | 0.494 | 686 |
| Latino | 0.15 | 0.357 | 686 |
| Male | 0.352 | 0.478 | 650 |
| Age | 20.393 | 4.948 | 631 |
| Pre-Test Knowledge | 3.397 | 1.017 | 638 |
| Ideology | 4.616 | 1.548 | 649 |

Each video treatment was roughly four minutes long, and began with the typical introduction used by the shows as they appear on television. Each video discusses the same information and uses both the host and several "cut-away" clips of other individuals. ${ }^{2}$ Unlike other experiments (i.e., Mutz, 2007; Mutz \& Reeves, 2005), the treatment in this experiment is not an edited version of a show or a certain phrase. These clips were the actual aired segments of the show itself. I use actual clips because the effect of extreme media is produced by a combination of the introduction, guests, and the manner in which the hosts discuss the information and so on. For this reason the treatments are the clips themselves. This may limit the types of causal claims I can make based on these shows. For instance, I cannot isolate the particular words or phrases that contribute or inhibit increases in knowledge or misperceptions. This is a limitation, but it is one that is required if we want to study real-life content, which always contains multiple images and phrases.

[^6]The questions used to construct the dependent variable - political knowledge - are constructed to be surveillance knowledge questions (Jerit et al., 2006). These types of questions are useful because they gauge if the subjects get information out of the treatment. The information to answer these questions was contained in the clips, but was also available knowledge to those who may be politically engaged. To ascertain the treatment effects of knowledge contained within the shows I ask specific questions about the topic covered in all of these clips: Arizona's S.B. 1070. The surveillance knowledge questions are: 1) "Which state passed a bill to address illegal immigration?," 2) "Who is the Governor of the state passing the immigration bill?," 3)"What is the name or number of the bill that addresses illegal immigration in Arizona?," 4) "Does the immigration law in Arizona require anyone who is asked to present their identification for immigration purposes?," and 5) "Which political party is responsible for passing the law in Arizona concerning immigration?"

The first two questions were open-ended where the subjects typed their answers. Answers accepted as correct and coded as one - zero for all others - for the first question was, "Arizona." For the second question the correct answer was, "Jan Brewer" or "Brewer." For the third question I accepted "SB 1070" or "1070." The last two questions the subjects answered via radial buttons on the computer screen. The fourth question was coded correct if answered as, "yes," and the fifth was coded correct if the subjects selected "Republican" from their answer choices. The information to answer these questions was contained in each clip used as a treatment.

### 3.7 Television Media

### 3.7.1 Experimental Results

The main dependent variable in lab experiment is political knowledge. It is measured as a surveillance knowledge variable and is measured with the five questions on Arizona's immigration law previously described. ${ }^{3}$ To gain a measure of political knowledge I conduct

[^7]a principle-component analysis using the five questions. The results (available in Web Appendix E for PCA table) demonstrate that the questions strongly load as one component with an eigenvalue well above 1, so I use that component measure as the dependent variable. Figure 3.1 displays the treatment effects of the media content on the PCA political knowledge measure with $95 \%$ confidence intervals using two-tailed tests.


Figure 3.1 Treatment Effects for Media on S.B. 1070 Knowledge

As demonstrated by Figure 3.1, it is clear that the PBS treatment is positive and significant compared to the control group. This finding is both intuitive, and expected. The important finding in this figure is that both of the extreme media treatments-Beck and Olbermann - are positive and significant compared to the control. These findings are important for two reasons. First, the dominant supposition in the literature at this time is that extreme media are not informative. These results show that this is not the case. Extreme media are at least as informative as traditional news like PBS. Secondly, these results demonstrate that extreme media can produce a positive externality in the form of political knowledge on a technical area of policy.

### 3.7.2 Interactions

There are two important interactions to assess when considering the effect of extreme media. The first of these is the effect of the ideological orientation of the viewers. As the
motivated reasoning literature demonstrates, individuals will use their prior attitudes to color the new information they acquire (i.e., see Nyhan \& Reifler, 2010). Liberals should learn more from Olbermann and PBS, but less if they are in the Beck treatment. Similarly, conservatives should learn more from Beck or PBS when compared to Olbermann. Beck and Olbermann should have the largest effects amongst their ideologically consistent viewers. Moderates should learn more from Beck and Olbermann than PBS because of the entertainment associated with these hosts (Baum, 2003a). To assess this possibility, I breakdown the subjects into their self-identified ideological groups - conservatives, moderates, and liberalsand plot the treatment effects on knowledge of Arizona's immigration law. The patterns in treatment effects comport with the basic expectations, but the confidence intervals overlap. The result is that though there is some evidence that the expected interactions may have some effect, the effects are not strong enough to reach acceptable levels of statistical significance. Figure 3.2 displays the treatment effects by the differences in ideology.


Figure 3.2 Treatment Effects for Media on S.B. 1070 Knowledge, by Ideology

The second interaction is the mediating effect of subjects' political knowledge, and can be found in Figure 3.3. It is possible subjects with higher levels of general political knowledge ${ }^{4}$ are affected differently in each of the treatments. If there are significant results

[^8]here, then prior political knowledge would have to be accounted for in explaining the effect of extreme media to educate on more technical policy areas. I divide the sample into three categories based on their pre-test political knowledge score - high pre-test knowledge, mean pre-test knowledge, and low pre-test knowledge. The mean of the sample was 3.3 based on the 5 question scale with a standard deviation of 1.016. Every subject who scored at least one standard deviation above the mean I coded as "high" pre-test knowledge, while all those falling at least one standard deviation below the mean are coded as "low" political knowledge. As with the previous interaction effect with ideology, these results also show inconclusive findings. For the high pre-test knowledge subjects, subjects in each of the treatment groups score significantly higher than the control. However, none of the extreme treatments, once again, are significantly different than the PBS treatment. This shows again that Beck and Olbermann are at least as informative as PBS on immigration, which is contrary to the expectations in the literature to this point. With the low and mean pre-test knowledge subjects, the confidence intervals are too large to make any substantive claims. In the low pre-test knowledge graph, the mean for Beck and Olbermann is higher than either PBS or the control suggesting that the entertainment or bombast associated with these shows may help subjects be engaged with the material. Without statistical significance there is little substantive to say outside of the general direction.

### 3.7.3 Cross-Sectional Data

To assess how well the casual effects uncovered in the experiment comport with actual reports of media use and factual political knowledge, I use cross-sectional data from the Annenberg National Elections Study from 2008.5 This dataset is superior to the National

[^9]

Figure 3.3 Treatment Effects for Media on S.B. 1070 Knowledge, by Pre-Test Knowledge

Election Study (NES) because the NES only asks questions about the frequency of media consumption and type. NES question do not probe the hosts or substance of the shows as the NAES does. The result is a level of specification with media independent variables that has yet to be seen in survey data.

Table 3.2 displays the summary statistics for the NAES data. The observations are quite large with this dataset because of the rolling sample the NAES uses. The dependent variable is Political Knowledge, and is coded zero to four. These questions are the NAES version of the traditional Delli Carpini and Keeter (1996) knowledge index common in the NES. So, while this type of knowledge differs from the surveillance knowledge used in the experiment, this knowledge scale is routinely used in political science and provides a validity check on knowledge as a general concept. ${ }^{6}$

The independent variable of interest is Extreme Host. Extreme Host is coded one if the host has a distinct ideological direction and uses ad hominem or bombastic attacks on their opponents, and is coded zero if they do not. For instance, Glenn Beck and Keith

[^10]Table 3.2 NAES Summary Data

|  | Obs. | Mean | St. Dev. | Min. | Max. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge | 29791 | 2.531 | 1.263 | 0 | 4 |
| Extreme Host | 41944 | 0.02 | 0.142 | 0 | 1 |
| Ext. Lib. Host | 41944 | 0.013 | 0.112 | 0 | 1 |
| Ext. Con. Host | 41944 | 0.008 | 0.089 | 0 | 1 |
| NE Con. Host | 41944 | 0.204 | 0.403 | 0 | 1 |
| NE Lib. Host | 41944 | 0.085 | 0.279 | 0 | 1 |
| Democrat | 55473 | 0.365 | 0.481 | 0 | 1 |
| Republican | 55473 | 0.297 | 0.457 | 0 | 1 |
| Ideological | 55915 | 1.34 | 0.94 | 0 | 2 |
| Education | 56610 | 5.563 | 2.311 | 1 | 9 |
| Male | 57967 | 0.427 | 0.494 | 0 | 1 |
| Age | 56686 | 53.258 | 16.001 | 18 | 97 |
| Income | 50161 | 5.779 | 2.155 | 1 | 9 |
| White | 56191 | 0.855 | 0.351 | 0 | 1 |
| Black | 56191 | 0.08 | 0.272 | 0 | 1 |
| Latino | 56191 | 0.155 | 0.123 | 0 | 1 |
| Interest in Politics | 57614 | 2.231 | 0.81 | 0 | 3 |
| Television Freq. | 57160 | 5.474 | 2.465 | 0 | 7 |
| Newspaper Freq. | 57625 | 2.916 | 3.02 | 0 | 7 |
| Internet Freq. | 44663 | 2.931 | 3.03 | 0 | 7 |
| Listen to Radio | 57625 | 0.387 | 0.487 | 0 | 1 |

Olbermann are coded as extreme, but Wolf Blitzer is not. This coding follows from the previous section and other literature (i.e., Dilliplane, 2011; Sobieraj \& Berry, 2011). To account for the argument that effects may be driven by one side of the ideological divide, I also break Extreme Host into Liberal Extreme Host and Conservative Extreme Host. ${ }^{7}$ I am also able to include two important control independent variables: Non-Extreme Liberal TV and Non-Extreme Conservative TV. Dilliplane (2011) demonstrates that distinctly partisan media produces differential effects on political behavior. Congruence in media choice and ideology produces political activity, while incongruence does not. Including controls for the partisanship or ideological direction of media also helps justify my claim that it is not just that people are paying more attention because of the self-selection effects for partisan media (Stroud, 2008), but extremeness of the host is significant as well. The Non-Extreme Liberal TV and Non-Extreme Conservative TV variables are based on coding by Dilliplane (2011), and coded here as one if the host is partisan and not extreme. All non-partisan, non-extreme television media are coded zero. Where Dilliplane references the partisan bias in the news, I label this variable with the partisan ideological direction for ease of interpretation because there is ample evidence that ideological polarization and homogeneity now make partisanship and ideology synonymous in many cases (Abramowitz, 2010).

The control variables are known predictors of civics-based political knowledge. Those who are more ideological may have higher levels of political knowledge because they will be more engaged, so Ideological is coded zero to two as a folded scale from Annenberg ideological question $(0=$ moderate, $1=$ somewhat ideological, $2=$ very ideological). Partisanship is known to predict political knowledge because partisans will be more engaged, so Republican and Democrat are both dichotomously controlled ( $1=$ identity with the party, $0=$ independent). Education will clearly predict political knowledge (Delli Carpini \& Keeter, 1996; Jerit et al., 2006), as should being male. Education ranges from one to nine and is as based off of the Annenberg question $(1=8$ th grade or lower, $2=$ some high school, no diploma, 3

[^11]$=$ high school diploma, $4=$ technical or vocational school, $5=$ some college, $6=$ Associate's or two-year college, $7=$ four-year degree, $8=$ graduate school, no degree, $9=$ graduate or professional degree). Male is dichotomous. Age and Income are also used as control with age being continuous and income being categorical at one through nine. Political Interest will significantly predict political knowledge (Delli Carpini \& Keeter, 1996; Jerit et al., 2006), so it is controlled with a variable ranging from zero to three where zero is "not interested" and three is "very interested" in politics. Racial controls are White, Black, and Latino with being White expected to positively predict political knowledge and Black and Latino expected to negatively related to political knowledge (Verba, Schlozman, \& Brady, 1995). Each of these variables is dichotomous. Finally, media consumption variables are Television, Newspaper, and Internet which are all coded zero to seven representing the number of days in the week a respondent uses these media get to information. Finally, I code for listening to political talk radio with a dichotomous variable.

Because the dependent variable, General Political Knowledge, is coded zero to four, ordered probit model specifications are necessary (Borooah, 2002). Additionally, as these data are obtained via a rolling cross-section sample over a year, I use robust standard errors clustered on the date of the survey ( 174 days in total). This will account for any variation over the term of the survey that may affect the results. Table 3.3 displays the first two model specifications testing the hypothesis that extreme television media are correlated with increased levels of political knowledge. The first model is a bivariate model testing the effect of the extreme host variable on knowledge without any controls. In Model 1 this variable is clearly significant, and it suggests that there is a correlation between extreme media consumption and civic-based political knowledge. Adding in controls in Model 2 the correlation from Model 1 is still present. Extreme Host is still positive and significant indicating that those who watch extreme hosts have higher political knowledge than those who do not. For the full results, I turn to Models 3 and 4 in Table 3.4.

In Model 3 the independent variable, Extreme Host, is positive and significant. This demonstrates that there is a significant correlation with watching extreme news media on tele-

Table 3.3 Ordered Probit Model for Political Knowledge (2008 NAES)

|  | Model 1 |  | Model 2 |  |
| :---: | :---: | :---: | :---: | :---: |
| Variable | Coefficient | Std. Err. | Coefficient | Std. Err. |
| Extreme Host | $0.478^{* * *}$ | 0.056 | $0.240^{* *}$ | 0.071 |
| Democrat | - | - | $-0.074^{*}$ | 0.023 |
| Republican | - | - | -0.0008 | 0.023 |
| Ideology | - | - | $0.019^{*}$ | 0.009 |
| Education | - | - | $0.209^{* * *}$ | 0.006 |
| Male | - | - | $0.469^{* * *}$ | 0.020 |
| Age | - | - | $0.011^{* * *}$ | 0.0007 |
| Income | - | - | $0.065^{* * *}$ | 0.005 |
| White | - | - | $0.244^{* * *}$ | 0.039 |
| Black | - | - | $-0.231^{* *}$ | 0.048 |
| Latino | - | - | $-0.259^{* *}$ | 0.091 |
| Interest | - | - | $0.197^{* * *}$ | 0.014 |
| TV | - | - | 0.006 | 0.006 |
| Newspaper | - | - | $0.009^{* *}$ | 0.009 |
| Internet | - | - | $0.023^{* * *}$ | 0.003 |
| Radio | - | - | 0.031 | 0.018 |
| Cutpoint 1 | -1.478 | 0.012 | 0.520 | 0.069 |
| Cutpoint 2 | -0.860 | 0.010 | 1.274 | 0.071 |
| Cutpoint 3 | -0.255 | 0.009 | 2.020 | 0.073 |
| Cutpoint 4 | 0.579 | 0.010 | 3.024 | 0.074 |
|  | $\mathrm{~N}=21455$ |  | $\mathrm{~N}=14608$ |  |
|  | Wald $\chi^{2}=71.37$ | Wald $\chi^{2}=4052.55$ |  |  |
|  | Pseudo $R^{2}=0.0013$ | Pseudo $R^{2}=0.094$ |  |  |

Note: $\dagger \mathrm{p}<.10,{ }^{*} \mathrm{p}<.05,{ }^{* *} \mathrm{p}<.01,{ }^{* * *} \mathrm{p}<.001$
Two-tailed tests; all models clustered on sampling date
vision and increased levels of civics based political knowledge. These findings are made more convincing by the controls for ideologically oriented-but not extreme - television. Both Non-extreme Conservative TV and Non-Extreme Liberal TV are positive and significant as well. The omitted category is all respondents who watch news which is non-ideological and non-extreme. One might expect watching Special Report with Brit Hume or The Situation Room with Wolf Blitzer to be correlated with informed viewers on civics-based political knowledge - which is the implication of these variables. However, even while controlling for these types of shows, extreme media-such as Countdown with Keith Olbermann and The O'Reilly Factor - still correlate with increased political knowledge. That extreme media consumption is correlated with higher levels of political knowledge when compared to individuals in the omitted category is a counter intuitive finding based on the previous literature.

One might consider that the variable for extreme host alone is not appropriate as there may be differences between liberal and conservative hosts. This possibility is accounted for in Model 4. Again, as with Model 3, the variables of interest are significant in the expected direction. This is strong evidence that the causal relationship exhibited by the experimental results are not laboratory effects and suggest external validity is not a threat to the experiment.

Turning to the controls for partisanship, being a Democrat is associated with lower political knowledge at the, while being a Republican is negative, but insignificant. Respondents who are more ideological are correlated with increased levels of knowledge in Model 2, but not Model 3 with the full specification. These results suggest that ideology and partisanship play little role in gaining political knowledge in this 2008 NAES sample. For the socioeconomic controls, education, male, income, and being white all positively and significantly predict having higher levels of political knowledge. These findings mirror other research on political knowledge (i.e., Delli Carpini \& Keeter, 1996; Jerit et al., 2006) and make the findings for Extreme Host more robust. Being black or Latino is associated with statistically significant lower levels of political knowledge. Finally, on the interest in politics and media consumption variables, the results comport with previous research as well. Interest in poli-

Table 3.4 Ordered Probit Model for Political Knowledge (2008 NAES), Full Specifications

|  | Model 3 |  | Model 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Variable | Coeff. | Std. Err. | Coeff. | Std. Err. |
| Extreme Host | $0.264^{* * *}$ | 0.072 |  |  |
| Ext. Lib. Host |  |  | 0.357* | 0.105 |
| Ext. Con. Host |  |  | 0.198*** | 0.093 |
| NE Lib. Host | $0.115^{* * *}$ | 0.023 | $0.166^{* * *}$ | 0.031 |
| NE Con. Host | $0.165^{* * *}$ | 0.031 | $0.116^{* * *}$ | 0.023 |
| Democrat | -0.065** | 0.023 | -0.067** | 0.023 |
| Republican | -0.016 | 0.024 | -0.015 | 0.024 |
| Ideology | $0.015^{* * *}$ | 0.009 | 0.015 | 0.009 |
| Education | $0.211^{* * *}$ | 0.006 | 0.211*** | 0.006 |
| Male | $0.467^{* * *}$ | 0.020 | $0.467^{* * *}$ | 0.020 |
| Age | $0.011^{* * *}$ | 0.0007 | $0.011^{* * *}$ | 0.0007 |
| Income | $0.064^{* * *}$ | 0.005 | $0.064^{* * *}$ | 0.005 |
| White | 0.241*** | 0.039 | 0.240*** | 0.039 |
| Black | -0.229 | 0.049 | -0.230*** | 0.049 |
| Latino | $-0.256^{* *}$ | 0.092 | $-0.257^{* *}$ | 0.093 |
| Interest | $0.183^{* * *}$ | 0.014 | $0.183^{* * *}$ | 0.014 |
| TV | 0.004 | 0.006 | 0.004 | 0.006 |
| Newspaper | 0.009*** | 0.002 | 0.009*** | 0.002 |
| Internet | $0.023^{* * *}$ | 0.003 | $0.023^{* * *}$ | 0.003 |
| Radio | 0.026 | 0.018 | 0.027 | 0.018 |
| Cutpoint 1 | 0.490 | 0.069 | 0.488 | 0.069 |
| Cutpoint 2 | 1.246 | 0.071 | 1.244 | 0.071 |
| Cutpoint 3 | 1.995 | 0.073 | 1.993 | 0.073 |
| Cutpoint 4 | 3.000 | 0.074 | 2.999 | 0.074 |
|  | $\quad \mathrm{N}=$ Wald $\chi^{2}$ Pseudo $R^{2}$ | 4608 $=4133.91$ $=0.095$ | $\mathrm{N}=1$ Wald $\chi^{2}$ Pseudo $R$ | 4608 $=4132.47$ $=0.095$ |
| Note: $\dagger \mathrm{p}<.10,{ }^{*} \mathrm{p}<.05,{ }^{* *} \mathrm{p}<.01,{ }^{* * *} \mathrm{p}<.001$ <br> Two-tailed tests; all models clustered on sampling date |  |  |  |  |

tics is positive and significant meaning that those who care about politics know more about it, while more frequent newspaper readers and those who access the internet often to obtain information are also correlated with increased levels of political knowledge.

The results reported in this section give external validity to the experimental results in the previous section. Taken together, these analyses demonstrate that, rather than being problematic for democracy, extreme media can serve a public function: they inform their viewers. This important point has so far been debated without being tested. These tests reveal the concerns espoused by some may be misplaced in terms of the dissemination of political knowledge.

### 3.8 Radio

The medium that is most often associated with extremeness or outrageousness is political talk radio (PTR). The prior PTR literature is almost uniformly focused on attitude change (see Barker, 2002; Barker \& Knight, 2000; S. E. Bennett, 2002a, 2002b, 2009; Hofstetter, Donovan, Klauber, \& Cole, 1994; Jamieson \& Cappella, 2010, for examples and review). Political talk radio has traditionally been assumed to be not helpful-if not actually harmful-for American politics (Hofstetter et al., 1994). These assumptions have changed over time, and talk radio listeners have been shown to be very difficult to mobilize en masse (Hofstetter \& Gianos, 1997). Because most research to date has focused on whether PTR changes attitudes or if PTR can make citizens more or less active in politics, the main dependent variable in these studies is not political knowledge.

For example, Barker (2002) finds that-in the case of Rush Limbaugh PTR listeners are persuaded to view conservative policies more favorably than liberal policies, while accounting for previous attitudes. Additionally, Barker and Knight (2000) show that on issues where Limbaugh is negative and discusses with regularity, his listeners attitudes show statistically significant change in his attitudinal direction. However, on issues where his portrayal is positive or intermittent, there is no statistically significant effect from Limbaugh listening. This implies that Limbaugh has some effect on his listeners, but that effect is conditional.

Jones (1998) uses the 1996 Republican primary in New Hampshire to test Limbaugh effect on citizen's attitudes toward public officials. Using NES data from that primary, Jones tests the pre-anti-Buchannan and post-anti-Buchannan attitudes of Granite State voters (Limbaugh apparently greatly disliked Patrick Buchannan, and repeatedly said so in response to Buchannan's increase in the polls nearing the primary). Jones clearly demonstrates the conservative skew of the Limbaugh audience, but his models do not detect a significant decrease in the opinions for Buchannan by primary voters. Lee and Cappella (2001), contrary to Jones, suggest that political talk radio is a key factor in opinion evaluation of public figures.

Thus, while these studies are informative about how exposure to PTR affects opinion change and behavior, it does not answer the questions about political learning. Jamieson and Cappella (2010) show that political talk radio "Balkanizes" listeners. They say little, however, about the effects of knowledge on these PTR listeners at-large, although they find that Rush Limbaugh listeners are woefully unknowledgeable about the 1996 Clinton campaign (Jamieson \& Cappella, 2010, p. 197-198). In contrast, my central research question is: Are PTR listeners more knowledgeable, generally, than non-listeners while controlling for known determinants of political knowledge? The answer to this question has implications for the quality of democracy in the United States, and the usefulness of talk radio as a medium for disseminating political information.

The contribution of this research is to test whether PTR produces a positive externality in the form of increased political knowledge. My hypothesis is that political knowledge is higher among PTR listeners when compared to non-listeners. In the next sections I describe the data I use to test this hypothesis and the methods used to mitigate issues of endogeneity and causality common with research on media effects.

### 3.8.1 Assessing Knowledge and Political Talk Radio

To test my hypothesis, I use data from NES surveys in 1996, 2000, and 2000, and the NAES in 2008. These years are selected from the NES because these are the only NES surveys where a question about PTR was explicitly asked during presidential elections.

These years are important because these encompass the years when PTR was reaching its early peaks in listenership. Furthermore, the 2000 and 2004 Presidential election campaigns were closely contested which helps make this a hard case to prove my theory. It is plausible that in these highly contested campaigns people might simply seek out information. Thus, it will be harder for me to find significant results than in years where the races were not highly contested. Because the 2008 NES does not ask about PTR, I turn to the National Annenberg Election Study (NAES).

There are additional benefits to the NAES because it is specifically designed to research various types of media and their effect on electoral politics. As a result, the NAES asks much more specific questions about radio listenership than the NES. Furthermore, the NAES is a rolling cross-sectional survey every month from December of 2007 to Election Day. This yields a total of 57,967 possible respondents, which is considerably more than the NES. ${ }^{8}$ Given the difference in question wording for the two surveys, it is impossible to combine them into the same dataset. However, they can work well as robustness checks for each other, and can test my theory over four election years with four distinct survey sample populations.

It is important to use data that can predict PTR consumption to estimate the propensity score for the matching model discussed below. S. E. Bennett (2002a) and Hollander (1997) suggest a number of variables to include for a propensity model. Also important is that these variables also affect levels of political knowledge. Using previous knowledge literature as a guide (Althaus, 1998; Bartels, 1996; Delli Carpini \& Keeter, 1996), it is clear that the variables chosen for these matching models should satisfy both of these concerns.

The dependent variable is a knowledge scale in both surveys. These follow from the Delli Carpini and Keeter (1996) knowledge index. The NES survey uses a 6 point knowledge scale while the NAES uses 4. It should be noted that the mean for each of these is at the

[^12]middle of the category ( 2.9 for the NES and 2.5 for the NAES). The independent variable of interest for the models presented here is dichotomous. For the NES models, it is a simple question asking if respondents listen to political talk radio. However, they do not probe respondents for specific show information or hosts. The NAES, conversely, does probe respondents to specify their talk radio listening habits. Both measures clearly capture what would be thought of as typical PTR (Limbaugh, Hannity, etc.), but the NES data may include things such as National Public Radio or a local radio station that only does news updates, but the respondent considers that PTR. There is no way to know which type of talk radio they listen to in the NES, so any results from those data must be assessed with that caveat. For the NAES, I use the name of the radio host the respondent listens to most often to code for PTR or not. 22,243 respondents claim they listen to radio on a regular basis in the NAES and only 5,249 listen to hosts that can be definitively coded as PTR.

The control variables used in this project are theoretically relevant predictors of higher political knowledge and listening to PTR. ${ }^{9}$ From the NES, I use demographic characteristics such as Income, Age, Male, White, and Education for control variables. Previous research demonstrates that these demographic variables play a key role in predicting listening to PTR. I also include media consumption variables such as Local TV Watching, National TV Watching, and Newspaper Readership. Finally, I control for political attitudes with the variables Ideological, which is a folded ideology index in the NES, and Attention to Politics. Those who are more ideological are likely to have more political knowledge and likely to listen to PTR, and the same is true for those who pay more attention to politics. The top of Table 3.5 lists the NES variables and their summary statistics. The bottom of the table lists the summary statistics for the NAES.

The variables taken from the NAES are similar, but with different question word and coding in some circumstances. This is a result of the differences in the original coding from the Annenberg Public Policy Center. Where the coding could be made the same as the NES,

[^13]Table 3.5 Matching Routine Summary Table for NES and NAES Surveys

| Variable | Observations | Mean | St. Dev. | Min. | Max |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge | 4142 | 2.922 | 1.822 | 0 | 6 |
| Radio | 4154 | 0.387 | 0.487 | 0 | 1 |
| Income | 4329 | 9.061 | 6.37 | 1 | 24 |
| Education | 4722 | 4.226 | 1.63 | 1 | 7 |
| Age | 4721 | 47.332 | 17.156 | 18 | 96 |
| Male | 4733 | 0.448 | 0.497 | 0 | 1 |
| While | 4723 | 0.788 | 0.408 | 0 | 1 |
| Ideological | 3487 | 1.142 | 0.931 | 0 | 3 |
| Natl TV | 4725 | 3.454 | 2.771 | 0 | 7 |
| Local TV | 4729 | 3.571 | 2.776 | 0 | 7 |
| Newspaper | 4733 | 3.327 | 2.898 | 0 | 7 |
| Pol. Attn. | 4733 | 1.107 | 0.714 | 0 | 2 |
|  |  |  |  |  |  |
| Knowledge | 7493 | 2.551 | 1.237 | 0 | 4 |
| Radio | 7493 | 0.434 | 0.495 | 0 | 1 |
| Income | 6547 | 5.871 | 2.155 | 1 | 9 |
| Education | 7293 | 1.781 | 1.581 | 0 | 4 |
| Age | 7321 | 53.258 | 15.545 | 18 | 97 |
| Male | 7493 | 0.423 | 0.494 | 0 | 1 |
| White | 7219 | 0.855 | 0.35 | 0 | 1 |
| Ideological | 7263 | 1.344 | 0.938 | 0 | 3 |
| TV | 7395 | 6.015 | 2.098 | 0 | 7 |
| Newspaper | 7460 | 3.112 | 3.072 | 0 | 7 |
| Pol. Attn. | 7449 | 2.45 | 0.721 | 0 | 3 |

Note: 1996, 2000, and 2004 NES data pooled on top; 2008 NAES summary data on bottom.
it has been done. For this database, I control-once again-for the following demographic characteristics: Income, Age, Male, White, and Education. The media consumption variables used as controls in this dataset do delineate between local television and national television. Thus they are only TV News and Newspaper Readership. The media variables are coded to reflect the number of days a week each respondent uses one of these media to get news or information about political issues, specifically the 2008 campaign. Attention to Politics ranges from 0 to 3 meaning "no interest" to "very interested," and though this is one less category than the NES it is unlikely to make a difference. Ideological is, as with the NES, a folded ideology scale. The reason for the differences between Ideological in both surveys (NES is zero to four, while NAES is zero to three) is because the NAES does not ask if respondents are "somewhat" conservative or liberal. Thus, there is one less category for the NAES ideology score. See the Appendix A for the variables' full names and question wording.

### 3.8.2 Matching

As in most research on political knowledge and media effects, omitted variable bias and endogeneity are concerns that must be addressed (Heckman, Ichimura, \& Todd, 1998). For instance, a very real concern for this project is the self-selection mechanism at work when people choose their media environments (Arceneaux, Johnson, \& Murphy, n.d.). It could be the case that people with higher levels of political knowledge are more likely to select into PTR, prima fascia. Without a systematic way to assign respondents into treatment and control groups no causal claims can be made. The only way around these issues is to conduct an experiment where we can be certain that the only difference between the treated (PTR) and the control (non-PTR) groups is our assigned treatment. I use propensity score matching to create very similarly matched pairs of listeners and non-listeners to estimate the effect of PTR on political knowledge. I also find similar results using ordered logistic regression modeling.

Though matching is becoming common in political science, some explanations of my
reasons for using it are warranted. Importantly, concerns about endogeneity and omitted variable bias can be minimized with propensity score matching (Becker \& Ichino, 2002; Rosenbaum \& Rubin, 1983). At the very basic level, matching is a method where two observations that are the same on all characteristics except for one-the treatment-are compared or "matched" to assess the effect of the treatment on a dependent or outcome variable. The most common type of matching for observational data is propensity score matching (Becker \& Ichino, 2002; Rosenbaum, 2002). The propensity score is obtained by estimating a logit or probit model assessing the likelihood of each observed control variable predicting the treatment variable. In this case, I use Radio as the treatment, so the propensity score estimates the likelihood that a respondent would listen to PTR. The second step in valid matching using propensity scores is ensuring that the data are balanced within their propensity score blocks (Becker \& Ichino, 2002; Ho, Kosuke, King, \& Stuart, 2011). Balance is achieved when there is no statistical difference between the treatment and control groups on any observed variables within each block. This process allows for valid causal inferences because the only statistical difference between the treated and control groups will be the effect of the treatment on the outcome. I generate my propensity score and balance using the pscore command in Stata (Becker \& Ichino, 2002). The pscore command estimates a probit model for the likelihood of receiving the treatment (radio), blocks on propensity score values, and balances within each of those blocks. The final balanced blocks for each of the matching models are in available in Appendix B.

Thus, researchers must take care to have a theoretically valid propensity score model, but it cannot contain covariates that make the estimation incapable of balance. Once the data are balanced and a propensity score is generated, researchers have a value assessing the propensity for each observation to have the treatment. Using the observed control variables used to obtain the propensity score, and the theoretically relevant matching technique ${ }^{10}$ a final matching procedure produces an average treatment affect (A.T.T.), standard deviations,

[^14]and $t$-tests of the difference between the matched observations (Becker \& Ichino, 2002).
Importantly, there are specific criteria researchers should consider when using matching. As outlined by Arceneaux and Johnson (2010), "1) treatment and comparison groups measure outcomes in identical ways, 2) treatment and control observations are sampled from similar locations or contexts, and 3) the data contain a rich set of variables that affect both the outcome and the probability of being treated." ${ }^{11}$ The data in this project meet each of these criteria as they are a random sample of the population within the stated years, the outcome is radio listenership, and the propensity score models are based on previous research. Another limitation of this method is that there could be omitted variable bias in the construction of the propensity score. Rosenbaum (2002) presents a way to calculate the omitted variable bias in matching models. Rosenbaum's sensitivity analysis is important because it provides a method for expelling possible omitted variable bias from the model, and solidifying the matching results. I go into more detail about this procedure and its results below. By controlling for the variables in the model, plus calculating out omitted variable bias, the causal path is clearer on the impact of my treatment (radio) on the outcome (knowledge).

### 3.8.3 Matching Results

The results for the NES are presented in Table 3.6. There are three sets of statistics presented representing the three elections where the NES asks PTR questions (1996, 2000, and 2004). These variables used to match are Income, Education, Age, Male, White, Ideological, Nat'l TV, Local TV, Newspaper, and Attention to Politics. I use each questionnaire as an independent model to assess these differences, if there are any, between elections. Given the exact question wording of the NES, pooling is a possibility. There would be no way to detect within year differences in the effect of PTR using a pooled model, thus, separate models are presented.

The average treatment effect (A.T.T.) is the statistic of interest for assessing the capac-

[^15]ity of the treatment to affect the outcome. As demonstrated in Table 3.6, PTR is positively and significantly related to increases in political knowledge in two of the three NES models. In 1996 and 2000, PTR is associated with positive and significant increases in political knowledge. In 2004, however, PTR as a treatment is positive but insignificant. The substantive effect of these average treatment effects can be thought of as almost a $1 / 6$ th of a standard deviation increase in both 1996 and 2000 from PTR. While this effect is modest it is nonetheless important because there is a history of null findings on this question. Additionally, matching mitigates concerns over endogeneity by ensuring that the only difference between the treatment and control conditions is the fact that the treatment listens to PTR. Essentially, a person who might otherwise be very politically knowledgeable is matched with another respondent who is also very likely to be knowledgeable (based on observed variables), but the difference is one respondent listens to PTR while the other does not. The respondent who listens to PTR is, on average, more knowledgeable about these important civics-based knowledge questions.

Table 3.6 Average Treatment Effect of Radio on Political Knowledge (NES)

| Year | N. Treated | N. Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 579 | 954 | 0.202 | 0.085 | 2.383 |
| 2000 | 561 | 994 | 0.234 | 0.087 | 2.684 |
| 2004 | 471 | 595 | 0.107 | 0.108 | 0.994 |
| Note: NES data from 1996, 2000, and 2004. A.T.T. is average <br> treatment effect while using kernel matching on all other <br> variables with bias-corrected bootstrapped standard errors. <br> See top of Table 3.5 for variables. |  |  |  |  |  |

Table 3.7 displays the results for the NAES 2008 data. The variables used to match in this dataset are Income, Education, Age, Male, White, Ideological, TV, Newspaper, Internet, and Attention to Politics. Table 3 demonstrates that in 2008, PTR, once again, is effective at producing statistically significantly higher levels of political knowledge when compared to
non-listeners. The effect in this sample is 0.076 , and it is statistically significant. This effect is smaller than the previous effects at roughly $1 / 8$ th of a standard deviation. Once again, given the history of null findings on this question, and the degree to which we know the predictors of political knowledge-specifically attention to politics-the ability of one medium to significantly increase knowledge in this cacophonous media environment is an important new result.

Table 3.7 Average Treatment Effect of Radio on Political Knowledge (NAES)

| Year | N-Treated | N-Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 | 4462 | 7446 | 0.128 | 0.024 | 5.375 |
| Note: NAES data from 2008. A.T.T. is average treatment effect |  |  |  |  |  |
| while using kernel matching on all other variables with |  |  |  |  |  |
| bias-corrected bootstrapped standard errors. |  |  |  |  |  |
| See bottom of Table 3.5 for variables. |  |  |  |  |  |

As previously mentioned, one serious threat to the validity of these findings is the possibility that there is omitted variable bias. This can be calculated, however, with the remainder of the effect attributed directly to the treatment on the outcome (Rosenbaum, 2002). Rosenbaum states that because the propensity score is a probit or logit model we can calculate the amount of variance in the treatment taken into account by the propensity score model. Any variance unexplained is the result of random error or omitted variables. For the purposes of validity testing, I will assume that any error left unexplained is omitted variable bias, but this is a stringent assumption. It could be the case that $30 \%$ of the variance is omitted variable bias while $70 \%$ is random error (or any other combination of percentages). Because I cannot know the proportions with certainty, I will assume that it is all omitted variable bias. Following Rosenbaum's procedure (also see Richey (2007) for an example) I calculate ROC curves for each of the four p-score models and subtract the percentage of unexplained variance from each matching models average treatment effect. For each of the years yielding significant results, subtracting the possible omitted variable bias out still demonstrates that PTR was significant for increases in political knowledge in 1996, 2000,
and 2008 for at least the $\mathrm{p}<.10$ level. ${ }^{12}$

### 3.9 Conclusion

The debate about the ways media generate and disseminate political information is an important one, and it is clear that there are normatively problematic issues with this type of media as people being to self-select into an increasingly polarized media environment (Prior, 2007; Stroud, 2010). Incivility or outrage and partisan bias in media have documented detrimental effects on various political attitudes and behaviors (Arceneaux \& Johnson, 2010; Dilliplane, 2011; Mutz \& Reeves, 2005). However, we should never lose site of the fact that extreme media also serve a purpose to inform, and based on evidence here they do just that. Using both an experiment and cross-sectional data on cable television extreme media hosts I show extreme media are correlated with positive and significant increases in aggregate political knowledge. This finding holds for both civics-based political knowledge and surveillance political knowledge. This is the first time this finding has been demonstrated with this medium particularly. I extend these findings to political talk radio, as well, where there is a history of null and negatively significant findings on this issue.

The extreme or outrage media literature is growing exponentially (Hansen and Kim 2011; Sobieraj and Berry 2011), and this study adds to it in an important way. Political knowledge is a fundamental trait for successful democratic citizenship with media the main conduit for knowledge in modern democracy (Delli Carpini \& Keeter, 1996; Graber, 2001). As research in this area moves forward, coupling the effects of all extreme media-radio, television, blogs, etc.-into a unified theory will be paramount. As with any study, however, there are caveats.

Firstly, more experiments need to be done to assess the differences in treatment effects found here. As stated earlier, this project is concerned with a holistic view of extreme media. Thus, more precise, shorter treatments could be done to isolate certain phrases or

[^16]segments of these extreme programs that will isolate the effects on knowledge acquisition or misperceptions. I am unable anything substantive about the indirect vs. direct effect at this time. More precise experimental treatments could elucidate these effects as well. Secondly, these results are based on one student sample. Student samples are universally accepted in experimental social science (Sears, 1986), but there is no replacement for replication in the scientific method. Future research should focus on non-student populations. Lastly, this project uses only one policy area-immigration. Replicating the results over more, perhaps more obscure policy areas will also help justify internal validity claims.

Fundamentally, this project demonstrates one key finding: extreme media can teach. Though this may seem obvious, it is not a claim without critics. Research of this nature is important because should it be discovered that extreme media do harm to politics then it will surely be the charge of politicians and policymakers to rectify the situation. However, just because the method of information dissemination disagrees with our traditional, classic understandings of rational political decision making does not mean that it is normatively problematic. In fact, as demonstrated here, extreme media may actually be beneficial if it produces important qualities such as political knowledge.

## CHAPTER 4

## EXPLORING THE EFFECT OF EXTREME MEDIA ON POLITICAL TRUST AND EFFICACY

### 4.1 Introduction

How do extreme political media affect key attitudinal characteristics like political trust and efficacy? This is the question that animates this chapter. In the next pages I will outline what political trust and efficacy are and how media can affect these attitudes. Political trust is considered among one to the most important attitudes in a democratic society (Uslaner, 2002). This is the case regardless of whether one believes that trust or distrust is the normatively better value. Additionally, efficacy is a key value if one wants to understand how citizens understand the power dynamics between themselves and the government in a society.

The point of this chapter in the light of this larger project is to demonstrate, once again, that the implications of extreme media on both television and political talk radio are not as straight forward as one might assume. Cappella and Jamieson (1997) note that political talk radio as a medium produces cynicism that is difficult to overcome. As listeners engage with the medium more and more they become jaded to the political system, and rather than become motivated citizens they withdraw. If this is the case - and it may well be - then we should see uniform decreases in political trust among extreme media consumers. Additionally, external efficacy should also be decreased-even if internal efficacy is increased-because what is the point of being active if politicians are going to ignore your demands? If extreme media are producing these kinds of effects then there is certainly reason to be concerned about their proliferation.

Conversely, it may be the case that these media produce a positive externality in the form of political trust or efficacy. As demonstrated in the previous chapter, extreme media
can produce political knowledge in both experimental setting and in cross-sectional survey data. Highlighting yet another way in which these media enrich our political system is a worthwhile endeavor, and is the goal of this chapter.

### 4.2 Political Trust

People are said to have political trust when they trust the actions and intentions of the government or politicians. Though political trust has been the subject of research since the 1950s there is still debate about whether or not political trust is institutionally specific, or if it is based on the evaluations of politicians in office at the time (Levi \& Stoker, 2000). Research demonstrates that both conceptions of political trust are valid under different circumstances (Citrin \& Green, 1986; Hetherington, 2005). Hetherington (1998), for instance, shows that political trust has an endogenous effect with both institutions and political actors. The upshot is that political trust is a complicated and vital research area.

Political trust is not to be confused with interpersonal trust (Putnam, 2001). While they are similar and may be equally important, they are caused by different underlying mechanisms (Uslaner, 2002). Interpersonal trust is specifically related to dealing with other citizens, while political trust is directly related to the affect toward the institutions or politicians in the government. Trust in government can be affected by scandals (Bowler \& Karp, 2004), for instance, but we would not expect that to affect citizens trust in each other.

The normative value of political trust a matter of debate with some declaring that political trust is good (Uslaner, 2002), while others claim that low levels of trust make the conditions for political action well met (Gamson, 1968). The merits to distrust or cynicism exist because if these attitudes are widespread they may spur political actors to change their behavior (Citrin, 1974; Miller, 1974). Early studies of trust in government attributed distrust to political parties not paying attention to centrists (Miller, 1974), but newer research indicates that phenomenon is no longer the case - if it ever was (see Citrin (1974) for a rebuttal to Miller (1974)). Political parties have become polarized causing
centrists to become less trustful There are various conditions under which political trust can be produced or inhibited. Some contend that political trust is a direct effect of evaluations of the policy and political options available (i.e., Miller, 1974).

Political trust is important because it has direct implications for participation. Early political science studies claim political trust is an important catalysts for participation because distrust meant cynicism and would thus inhibit political activity (Almond \& Verba, 1963). Indeed, as political participation feel over the 20th Century, many began to assume that this was the case. Yet, the notion that political distrust is anathema to political activity has not been borne by decades of empirical research (Rosenstone \& Hansen, 1993). Gamson (1968) posits that low levels of political trust - coupled with high levels of efficacy - is exactly the prerequisite for political participation. In general, demonstrating that trust either predicts increased or decreased levels of participation has been elusive. However, trust is a significant predictor of support for policies in some circumstances.

Hetherington's (2005) seminal work on political trust highlights the fact that as American's have lost their trust in the Federal government, they are less willing to support a wide range of government policies. Hetherington (2005, p. 3) states, "declining political trust has played a central role in the demise of progressive public policy in the United States over the last several decades." Trust may not have a play a causal role in participation in the aggregate, but it is clearly a key mechanism for public opinion and support of policy decisions. Furthermore, trust in government is a significant predictor of voting for third party candidates (Hetherington, 1999). Trust as an important predictor in vote choice is especially the case when candidates consistently use anti-government language and messages (Citrin \& Luks, 2001).

Like political trust, much ink has been spilled over political efficacy. Efficacy as a concept has figured prominently in political science for nearly seventy years. There are two distinct types of efficacy: internal and external (Craig, Niemi, \& Silver, 1990; Niemi, Craig, \& Mattei, 1991). Internal political efficacy, in short, is the feeling that one can (or cannot) affect the political system (Campbell, Gurin, \& Miller, 1954; Morrell, 2003).

External efficacy, while closely related to internal efficacy, relates to "system responsiveness" to citizen action (Abramson \& Aldrich, 1982; Finkel, 1985). Both of these attitudes are important to consider when assessing how citizens interact with the political system. Unlike the debate over the levels of trust in government, most scholars agree that increased levels of efficacy-particularly internal efficacy-are necessary for vibrant participatory democracy.

Efficacy is linked to increased participation in a variety of activities. Most prominently in the literature, we know that the higher the levels of efficacy one feels the more likely they are to participate in election campaigns (Abramson \& Aldrich, 1982; Rosenstone \& Hansen, 1993). This is a vitally important finding. The decline in electoral participation is a perennial concern for political scientists, and decreasing levels of efficacy are partly to blame (Teixeira, 1992). Efficacy has been shown to be an important predictor of registering to vote (Timpone, 1998), rather than voting itself, which highlights the importance of efficacy generally. Efficacy is linked to civic skills (Verba et al., 1995), and it has positive implications for engaging in political discussion with others (Morrell, 2005).

### 4.3 Media Effects on Trust and Efficacy

Various types of media have shown the capacity to impact political trust and efficacy. Although, scholars have yet to systematically look at extreme media over a long period of time. The closest thing to extreme media research is research on "incivility" in political television. Experiments show that uncivil exchanges significantly decrease trust (Mutz \& Reeves, 2005), and so, too, do shows that use close up shots of television hosts (Mutz, 2007). Incivility, however, is not in question in this research project. There can be uncivil exchanges on ABC Nightly News, but ABC Nightly News is by no means "extreme." Forgette and Morris (2006) find similar results using CNN's Crossfire as a treatment and the traditional political roundtable after a State of the Union address. Forgette and Morris show that Crossfire's effects on trust in politicians and government are negative and significant. Soft news (i.e., The Daily Show with Jon Stewart) also decreases political trust, but increases internal political efficacy (Baumgartner \& Morris, 2006) which indicates that there can
be differential effects expected under some circumstances. Finally, political talk radioa conservative, and almost uniformly extreme medium (Sobieraj \& Berry, 2011) -is also an independent variable of interest for political trust. Using the Gamson Hypothesis as a theoretical construct, Hollander (1997) finds that political talk radio listenership has little to do with political efficacy.

All of this research highlights one failing of the literature: there is no long-term gauge on any one medium to see how its effects on trust change over time. Thus, there is no established theoretical basis to expect any particular type of effect on political trust. This means that even though there may be some significant findings at certain times with certain media, we have no strong reason to believe that effect is constant or that it is not constant. This project seeks to fill that void, particularly with regard to political trust.

Efficacy has an equally varied empirical trail, and the notion that media can affect trust of efficacy is not completely verified by the literature. S. E. Bennett, Rhine, Flickinger, and Bennett (1999) use the 1996 NES to predict trust in government for the mid-1990s. In their models, neither political talk radio nor general media consumption significantly affected trust in government. Similarly, Banducci and Karp (2003) investigate the link between media and trust and efficacy using data from the United States, New Zealand, and Britain. For the United States, attention to media was not a significant predictor for either trust in government or internal efficacy.

Media and tone effects on efficacy are mixed at this time (Brooks \& Geer, 2007; Mutz \& Reeves, 2005). Television is suggested as a deleterious medium for efficacy (Mutz \& Reeves, 2005; Putnam, 2001). Mutz and Reeves (2005) find that incivility decreases efficacy, while Baumgartner and Morris (2006) show that The Daily Show with Jon Stewart increases efficacy versus a control. Research on political talk radio suggests that entire medium is predicated on low levels of efficacy-leading to cynicism-as the radio becomes the outlet for venting frustration with the political system (Cappella \& Jamieson, 1997). Internet access can increase external efficacy, but is associated with decreased internal efficacy (Kenski \& Stroud, 2006).

### 4.4 Theory and Hypotheses

There is not yet a unifying theory on how media should affect political trust and efficacy. As of today, the research is as scattered as it has ever been. Thus, there is fertile ground for theoretical development and testing. My theory is as follows: Political trust should be affected by extreme media in relation to the macro-political environment. Those who listen to political talk radio under Republican presidential administrations as this media is primarily a conservative medium-particularly in the time frame studied here. For extreme television, trust should be decreased because the time period in this study where extreme television is studied takes place in 2008. The financial crisis would affect the zeitgeist negatively for either political party. Democrats will be made distrustful by extreme hosts because the Bush administration was in power, while Republicans would be less trustful of government because the government was intervening in the economy is serious and extensive ways. Internal efficacy should be positive because these media will continually tell their audience how they hold the true power, and that they should hold the government accountable. External efficacy should also be increased among consumers of these media because they will make the government seem more approachable to understandable to their audience.

With this theoretical perspective, I can make the following formal hypotheses:

- Hypothesis 1: Political talk radio should cause increases in political trust when a conservative government is in power. Conversely, it should be negative when a liberal or divided government is in power.
- Hypothesis 2: Political talk radio should cause increases for internal political efficacy and external efficacy because listeners are inundated with information about how they are or can affect the government versus non-listeners.
- Hypothesis 3: Extreme television media should cause decreased political trust, but increased efficacy.


### 4.5 Data and Methods

As is highlighted by the literature (see Finkel (1985) and Hetherington (1998) for extended discussions), isolating the effects of or on political trust and efficacy is notoriously difficult. The rash of insignificant findings in cross-sectional work is due in part to endogeneity issues. Experiments are capable of locating causal mechanisms, but the few that exist (i.e., Mutz and Reeves 2005) are not yet borne out in cross-sectional data examinations. A primary reason for the null effects of media efficacy is the "one-off" nature of the research. Many studies use only one year's data in their study making generalizable claims elusive (Hollander, 1995, 1997). Furthermore, there is no research testing extreme television media on trust or efficacy at all. Thus, this area is primed for investigation.

A perennial concern for media studies is isolating the causal direction of the dependent and independent variables. For instance, is it because one is conservative that one watches FOX News, or is it because one watches FOX News that they become conservative? This endogeneity problem is difficult to overcome. However, here-as in the previous chapter on political knowledge-I employ matching to mitigate concerns about endogeneity. By estimating a matching model with listening to PTR or consuming extreme political television I can make causal inferences with cross-sectional data.

The dependent variables used in this chapter are taken from the National Election Study for 1996, 2000, and 2004. For 2008, I use National Annenberg Election Survey data. ${ }^{1}$ Importantly, I am not estimating any pooled models. Each matching model will be done with only that year. Thus, question wording differences are important caveats, but not the fatal flaw they would be if I needed or wanted to estimate pooled models. The dependent variables for trust in government in 1996, 2000, and 2004 are constructed from the NES trust battery. This battery consists of four questions listed by their traditional shortened forms: "Trust D.C.?," "Waste Tax," "Big Interest," and "Crooked" (Craig et al., 1990; Hetherington, 2005). This scale ranges from zero-meaning that the respondent does not

[^17]trust the government at all-to eight-meaning that the respondent has the most trust in government. For the 2008 Annenberg data, I use their approximation of this question. Their question simply asks, "Thinking about the federal government in Washington, how much of the time do you think you can trust the federal government to do what is right: always, most of the time, or some of the time?" They allow respondents to choose "never" as well, so this variable ranges from zero to four. It has less variation than the NES measure, but the underlying construct is the same. Furthermore, using only one or two of the trust battery questions is common in studies on political trust (Hetherington, 1999), but-like Hetherington-I seek to utilize the full range for the most leverage on the question.

For political efficacy, I do not use the entire NES battery. The reasons for this are threefold. First, there are only two questions per NES study in 1996 and 2000 to approximate internal efficacy. ${ }^{2}$ In neither survey I use does the alpha coefficient for the scale exceed 0.41 , so there is reason to believe that those questions do not make a valid scale in the surveys I use. Secondly, the NES omitted the questions used for internal efficacy in 2004. ${ }^{3}$ They no longer asked if politics was "too complicated" for people like the respondent to understand. Thus, I am unable to make any claims about internal validity at all. Finally, I use only the "have a say" question for external efficacy because it is contained on all four surveys. So, the internal efficacy question used is, "Sometimes politics and government seem so complicated that a person like me can't really understand what's going on." The answers range from zero, meaning strongly agree, to four, meaning strongly disagree, and the higher the number the more efficacy the respondent exhibits. For external efficacy the question used is, "People like me don't have any say about what the government does." Again, the answer choices range from zero to four with the meanings the same as the internal efficacy question. The questions and answers to the NAES are the same as the NES.

[^18]
### 4.6 Results

I begin by assessing the effect of political talk radio on political trust over a series of election years. This study represents the first time this medium has been assessed over a period this long. Two of the fundamental issues with previous research demonstrating null results is the lack of a significant time span and the lack of controlling for endogeneity. I mitigate both of those concerns here. In Table 4.1 and Table 4.2 the average treatment effects (A.T.T.) ${ }^{4}$ for political talk radio on trust in government are demonstrated. In three of the four election years in question political talk radio listening is a significant predictor of trust in government. Two of the years, 1996 and 2008, the effect is negative. In 2004, the effect is positive. This confirms my theoretical expectation that the macro-political environment as a key explanatory role for noting the effects of this medium.

Table 4.1 Treatment Effects of PTR on Trust in Government in 1996, 2000, and 2004 (NES)

| Year | N. Treated | N. Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 9 9 6}$ | $\mathbf{5 7 9}$ | $\mathbf{9 5 4}$ | $\mathbf{- 0 . 2 7 8}$ | $\mathbf{0 . 1 1 7}$ | $\mathbf{- 2 . 3 7}$ |
| 2000 | 561 | 994 | -0.141 | 0.159 | -0.891 |
| $\mathbf{2 0 0 4}$ | $\mathbf{4 7 1}$ | $\mathbf{5 9 5}$ | $\mathbf{0 . 3 9 1}$ | $\mathbf{0 . 1 2 8}$ | $\mathbf{3 . 0 5 6}$ |

Note: A.T.T. is average treatment effect while using kernel matching on all other variables with bias-corrected bootstrapped standard errors.

In 1996 and 2008 the Democratic Party was either in the White House (1996) or controlled a both chambers of the Congress (2008). As political talk radio is a consistently conservative medium (Jamieson \& Cappella, 2010) it makes sense that listeners to political talk radio would have lower trust in the government. Talk radio hosts would be relentlessly inundating their listeners with negative frames and information about the role of government (Cappella \& Jamieson, 1997). This is especially true in 2008 as dire warnings about the

[^19]economy and the lack of government oversight allowed banks stand on the brink of collapse as an industry. Thus, the treatment effects in 1996 and 2008 are expected. In 2004, however, political talk radio significantly increases trust in the government. This is a novel finding, but one that is theoretically expected given the state of the government in aggregate.

Table 4.2 Treatment Effects of Extreme Media on Trust in Government in 2008 (NAES)

| Medium | $N$-Treated | $N$-Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{P T R}$ | $\mathbf{4 4 6 2}$ | $\mathbf{7 4 4 6}$ | $\mathbf{- 0 . 0 3 3}$ | $\mathbf{0 . 0 1 0}$ | $\mathbf{- 3 . 2 6 7}$ |
|  |  |  |  |  |  |
| Extreme TV | 311 | 10239 | -0.087 | 0.055 | -1.585 |

Note: A.T.T. is average treatment effect while using kernel matching on all other variables with bias-corrected bootstrapped standard errors.

In 2004, George W. Bush and the Republican leadership in the Republican-controlled Congress ran a phenomenally successful campaign (Brader, 2006). Understanding that political talk radio is a conservative medium, we would expect that political talk radio hosts would constantly reference the (Republican) government and highlight what a tremendous job they did, particularly with reference to terrorism. The Bush campaign team made reelection appeals based on how they kept the country safe after $9 / 11$ a central component of their strategy (Brader, 2006). Thus, while previous scholarship expected that political talk radio as a medium would decrease trust in government (Cappella \& Jamieson, 1997; Hollander, 1997), I demonstrate here that it also increases trust under certain conditions (i.e., a conservative government). This finding comports with our understanding of media effects because the hosts on political talk radio would prime their listeners to trust the government when there is a government with which the hosts have ideological agreement (Graber, 2004).

Turning to the null results, we see that in 2000 political talk radio and in 2008 extreme political television hosts ${ }^{5}$ have a negative, but insignificant, effect on political trust. In both

[^20]instances, theoretically based explanations justify the null findings. In 2000, the incumbent Democratic President was preparing to leave office. More than that, however, was that Bill Clinton was not only a Democrat, but some suggest he was the primary catalyst for the explosion of political talk radio as a legitimate genre (Barker, 2002; Jamieson \& Cappella, 2010). So, as he was preparing to leave office, the main focal point for the ire and vitriol coming out of political talk radio for nearly a decade is a lame-duck. Coupled with the fact that the Republican majority coming out of the 1994 mid-term elections is no longer a novelty, but a reality of American politics, conservatives and political talk radio hosts were likely ambivalent about the degree to which they trusted the government. That supposition is supported by the matching results presented here. Once again, conceptualizing of political talk radio - or extreme media generally - as a monolithic entity loses the nuance of the role these media play in the political system. Turning to the 2008 extreme television finding, the results can be explained by the fact that this variable is not decided conservative or liberal. There are more conservative host consumers coded because - particularly in 2008conservative extreme television hosts have a bigger presence on television than liberal hosts. Thus, the negative effect can be explained. The null result generally is the explained by the fact that the opposing ideological directions of the shows do not lead to a clear theoretical explanation for this type of medium. The results for efficacy for these hosts are much clearer.

The results for average treatment effects on external efficacy are displayed in Table 4.3 and Table 4.4. Again, as with the effects on political trust, political talk radio is a significant predictor of external political efficacy in 1996, 2000, and 2008. Consuming extreme political television is also a positive and significant predictor of internal political efficacy.

Because political talk radio hosts consistently discuss politicians, issues, and ways the government scholars have consistently looked for political talk radio to be positively associated with efficacy-both internal and external (Banducci \& Karp, 2003; Hollander, 1997). They have, however, been consistently bedeviled by insignificant findings. This results presented by the matching models estimated here suggest a reason for this empirical history. Starting with 1996, the treatment effect is 0.216 . The question used to measure external

Table 4.3 Treatment Effects of PTR on External Efficacy in 1996, 2000, and 2004 (NES)

| Year | N. Treated | N. Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 9 9 6}$ | $\mathbf{5 7 9}$ | $\mathbf{9 5 4}$ | $\mathbf{0 . 2 1 6}$ | $\mathbf{0 . 0 7 8}$ | $\mathbf{2 . 7 5 8}$ |
| 2000 | 561 | 994 | 0.093 | 0.077 | 1.213 |
| $\mathbf{2 0 0 4}$ | $\mathbf{4 7 1}$ | $\mathbf{5 9 5}$ | $\mathbf{0 . 2 5 1}$ | $\mathbf{0 . 1 1 1}$ | $\mathbf{2 . 2 5 9}$ |
| Note: <br> on all other variables with bias-corrected bootstrapped standard errors. |  |  |  |  |  |

efficacy in this study is the question that asks if the respondent feels as though they "have a say" in what the government does. With a mean of 1.98 and standard deviation of 1.29 , an average treatment effect of 0.216 means that listening to political talk radio increased the external efficacy of listeners over non-listeners by about $1 / 6$ th a standard deviation. While this effect seems substantively small, it is impressive because of the myriad factors that we know go into predicting external political efficacy (Abramson \& Aldrich, 1982; Almond \& Verba, 1963; Finkel, 1985; Niemi et al., 1991). For 2000, external efficacy-like political trust before - is insignificant. The sign is positive which indicates that political talk radio influenced efficacy in the expected direction, but the insignificant is likely due to the ambivalent nature of the macro-political environment at the time. In 2004, we see that the average treatment effect is larger than 1996 at 0.251 . The 2004 NES external efficacy question has a mean of 2.43 and standard deviation of 1.40. Thus, the increase in efficacy for listeners over non-listeners is roughly $1 / 6$ th of a standard deviation just as it was in 1996.

Table 4.4 Treatment Effects of Extreme Media on External Efficacy in 2008 (NAES)

| Medium | $N$-Treated | $N$-Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PTR | $\mathbf{4 4 6 2}$ | $\mathbf{7 4 4 6}$ | $\mathbf{0 . 1 5 9}$ | $\mathbf{0 . 0 2 8}$ | $\mathbf{5 . 7 5 1}$ |
| Extreme TV | 311 | 10239 | 0.010 | 0.114 | 0.091 |

Note: A.T.T. is average treatment effect while using kernel matching on all other variables with bias-corrected bootstrapped standard errors.

Finally, to extend the effect of political talk radio to 2008, we see that the average treatment effect is 0.159 . The mean for the external efficacy question in the National Annenberg Election Survey is 2.07 with a standard deviation of 1.51 . Thus, the effect is about $1 / 8$ th of a standard deviation. As with the other matching specification, this is a substantively small increase in efficacy, but the fact that any one medium could significantly affect any complicated attitude such as efficacy is an important finding. Consuming extreme television media is statistically insignificant, but is signed in the correct direction.

External efficacy is only half of the story. ${ }^{6}$ Extreme media may also increase internal efficacy because of the constant discussion of political issues, actors, and institutions. Consumers of these media may feel an increased ability to understand the system, actors, and institutions. Table 4.5 and Table 4.6 show the average treatment effects for matching models with the internal efficacy question as the dependent variable. This question asks if respondents felt that the system was "too complicated" or "complex" in 1996, 2000, and 2008. Though these questions are often used as part of a scale (Finkel, 1985; Morrell, 2003) research shows that they measure the same underlying construct. I forego the use of the efficacy scale in this study because the NAES does not use it. Even though I am unable to compare studies, per se, I attempt to keep the dependent variables as close as I possibly can when applicable.

Table 4.5 Treatment Effects of PTR on Internal Efficacy in 1996 and 2000 (NES)

| Year | N. Treated | N. Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 9 9 6}$ | 579 | 954 | 0.158 | 0.083 | 1.91 |
| $\mathbf{2 0 0 0}$ | $\mathbf{5 6 1}$ | $\mathbf{9 9 4}$ | $\mathbf{0 . 2 0 8}$ | $\mathbf{0 . 0 9 8}$ | $\mathbf{2 . 1 1 6}$ |
| Note: <br> on all other variables with bias-corrected bootstrapped standard errors. |  |  |  |  |  |

In Table 4.5, the 2000 NES shows that listening to political talk radio has a positive and significant effect on internal political efficacy. In 2000, those who listened to political talk

[^21]radio were more likely than those who did not to feel the government was not too complicated. The average treatment effect in this model is about $1 / 7$ th of a standard deviation. The results from 1996 are insignificant, but positive which is in the expected direction.

Table 4.6 Treatment Effects of Extreme Media on Internal Efficacy in 2008 (NAES)

| Medium | N-Treated | N-Control | A.T.T. | S.E. | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PTR | $\mathbf{4 4 6 2}$ | $\mathbf{7 4 4 6}$ | 0.159 | 0.028 | 5.751 |
| Extreme TV | $\mathbf{3 1 1}$ | 10239 | $\mathbf{0 . 5 5 2}$ | $\mathbf{0 . 1 1 3}$ | 4.877 |

Note: A.T.T. is average treatment effect while using kernel matching on all other variables with bias-corrected bootstrapped standard errors.

In Table 4.6 we have the matching estimations for 2008. The question used in the Annenberg study matches the question asked in the earlier NES surveys-"is the government too complicated?" Only political talk radio has a significant effect on this question in this year. The substantive effect of the treatment is roughly $1 / 10$ th of a standard deviation. Turning to extreme political television, we see that the substantive effect of this medium is greater than political talk radio. The effect of watching extreme political television significantly increases internal efficacy about $1 / 3$ rd of a standard deviation. This is an impressive increase for one medium. This suggest that despite the problematic issues that might arise from increasing ideological polarization of media (Prior, 2007) there are potential benefits as well such as increased internal efficacy.

As noted by the hypotheses, I expected that consuming extreme political media would have nuances effects across election years given the macro-political environment. In general, my theory has been supported. I find that political talk radio is positively related to trust when there is a conservative government (2004), negative with a liberal or mixed government (1996 and 2008), and insignificant when there is ambivalence as to the direction of the government (2000). External efficacy should be positivity increased by extreme media because consumers of these media are able understand the actions of government and how they, as citizens, may affect those decisions. This is confirmed for political talk radio in some years
(2000, 2004, and 2008), but not extreme political television. For internal efficacy, extreme media should increase this type of efficacy because viewers and listeners are constantly informed by hosts about ways they can or have affected the government. This is confirmed for both political talk radio $(1996,2000$, and 2008 ) and extreme television media (2008).

### 4.7 Conclusions

Recent media effects research has decried the corrosive impact of extreme or outrageous political media on the American political system (Berry \& Sobieraj, 2011; Cappella \& Jamieson, 1997; Jamieson \& Cappella, 2010; Sobieraj \& Berry, 2011). What these works lose sight of is the fact that despite the appearance of harm, these political media play an important role for those who consume it. Indeed, we have reason to be wary of the language used in these media (Sobieraj \& Berry, 2011) as it certainly does not conform to the notions about how deliberation occurs in a democratic society (Habermas, 2006). Nonetheless, to cast aspersions on these media as uniformly problematic is to overlook the positive externalities that they provide. In the previous chapter I noted that these media can produce political knowledge. In this chapter I establish that they also have a role in producing or inhibiting trust in government, and that they almost always produce internal efficacy and some external efficacy. These benefits of these media have yet to be explored in the detail provided here.

The primary finding of this project is that extreme political media are important to understand in today's political environment. As these media become more bountiful, we need to make sure that we understand the impact in a more holistic manner than we have previously. Earlier studies either on political talk radio or the hosts I term "extreme" were hampered either because they did not take into account the role these media play in the system (i.e., their relationship to the macro-political environment) or they could not take this into account given the scope of their study (i.e., usually one year or survey). I take both of these factors into account and demonstrate findings where others were null. By using matching I am able to overcome problems of endogeneity. Because I use multiple surveys in
four successive presidential election years I am able to replicate my findings over the long term to show the theoretical trends I expected. As with any study, this one is not without caveats.

First, because the questions on the NES change over time, and because the Annenberg survey uses only one external and internal efficacy question these findings much be tempered. However, in terms of measurement, the questions I use are valid questions used over time for studying efficacy (Morrell, 2003). Similarly, for political trust, I am able to use the additive trust scale from the NES to estimate the effects for those models. Annenberg does not have a trust scale, but rather a single trust in government question. So, the results do not replicate in the strict sense, but again, the question used by Annenberg is known to tap the same underlying construct as the NES scale.

Political knowledge, political trust, and efficacy are not the end of the discussion for extreme political media. There is ample reason to believe they affect another important political attitude: political tolerance. The picture of extreme political media I am painting has thus far been one where extreme political media actually generate traits that we might not associate with them. However, if there is an area where extreme political media are likely to be troublesome it is in an area like political tolerance because the self-selection and the type of language used in these media make them prime arenas for increased political intolerance. So, for the next chapter, I turn to political tolerance.

## CHAPTER 5

## POLITICAL TOLERANCE AND EXTREME MEDIA

### 5.1 Introduction

Do extreme media affect political tolerance? Thus far in this dissertation I have demonstrated that there are positive effects on political knowledge, and contingent effects on political efficacy and trust. To what degree can these media affect this important quality in American democracy? This question is vital given the evolving nature of media in American politics. Citizens are choosing increasingly "outrageous" content (Sobieraj \& Berry, 2011). The aim of these media outlets and personalities is both to disseminate information, but also to push a particular point of view with a significant degree of bombast. Understanding the ways these media affect citizens is difficult using traditional methods such as polls because of the self-selecting nature of media consumption (Arceneaux et al., n.d.). Thus, to get leverage on this type of research question an experiment is best, and is used here to test my hypotheses.

This project is one of the first to examine extreme media effects. The current literature shows that media outlets are becoming increasingly diverse generally and extreme outlets are becoming increasingly important for American politics. An example of this increasing diversity is Baum (2003a, 2003b) as he demonstrates that "soft news" (i.e., Inside Edition or Oprah) has positive effects such as increased foreign policy knowledge and awareness of political actors. Others investigate "high-conflict" media (i.e., argumentation between the show host and guests) showing that television with higher levels of conflict significantly lower trust in public officials, political parties, and institutions (Forgette \& Morris, 2006). Mutz and Reeves (2005) show that incivility in televised political discussion decreases trust, while Mutz (2007) shows that incivility decreases the extent to which viewers consider oppositional points-of-view legitimate.

The missing research link in these studies on media effects on political attitudes are 1) research on newly defined extreme media, and 2) research on political tolerance and political knowledge in the wake of consuming such media. This project utilizes a laboratory experimental design to assess both of these points. I find that extreme media personalities increase tolerance toward their preferred political groups, but there is no significant effect on the ideological out-groups of the hosts used here. These findings have implications political tolerance as we know it, and suggest that our understanding of media effects on political tolerance is still evolving.

### 5.2 Political Tolerance and Its Individual-Level Determinants

Political tolerance is a key dimension on which normatively good democracy citizenship is based (Stouffer, 1955; Sullivan, Piereson, \& Marcus, 1993). Tolerance is the capacity to respect heterogeneous beliefs, values, and opinions while still maintaining one's own beliefs, values, or opinions (Sullivan et al., 1993). Most research on political tolerance revolves around the capacity for citizens to respect the civil rights of their "least-liked" or out groups (Gibson, 1992; Sullivan, Marcus, Feldman, \& Piereson, 1981; Sullivan et al., 1993). Understanding the conditions that mitigate or encourage tolerance is a vital endeavor. The literature on political tolerance shows that there are a number of attitudinal and environmental factors that can affect political (in)tolerance, and show that political tolerance is not a static variable.

In his seminal work, Stouffer (1955) examined the extent to which Americans in the 1950s believe that communists should be afforded civil liberties in the United States. His work demonstrated two key findings: 1) tolerance toward out-groups was not widespread and the lack of it was predicated on the threat these groups represented, and 2) those who had leadership positions - elites-had more tolerance toward these out-groups that those who were not elites (Stouffer, 1955; Sullivan \& Transue, 1999). The finding that Americans had little trouble or even a willingness to take away other citizens' civil liberties was and continues to be troubling. Other research suggests perhaps Americans are not as intolerant
as Stouffer claimed, and that Stouffer's results are based on his question wording and groups used in his survey (i.e., communists in the 1950s).

Prothro and Grigg (1963) and McClosky (1964) both delve deeper into aspects of Stouffer's earlier work. Prothro and Grigg (1963) do so by investigating the degree to which citizens in Ann Arbor, Michigan and Tallahassee, Florida support the institutions or "rules of the game" by asking survey questions about minority rights and civil liberties. McClosky (1964) interviews attendees to national parties conventions, and asks them questions gauging their level of support for civil liberties for their political opponents. In both cases, the researchers replicate Stouffer's earlier findings and they show that there are, "carriers of the creed' who protected the democratic system from the majority of citizens who did not fully understand or support it" (Sullivan \& Transue, 1999, p. 629). These early empirical tests of tolerance in America show that it is not uniformly distributed and depending to whom and how you ask questions about tolerance results vary widely.

Another way intolerance is demonstrated to be less pernicious than originally though is when it is pluralistic in nature (Sullivan et al., 1993). This is to say, when there is no clear "enemy," but tolerance is decreasing in a society, there may be little reason to believe intolerance will necessarily have deleterious effects. However, should an "other" be established, intolerance will become problematic quickly (Gibson, 2007). Developing an "other" becomes easier when values like social capital are on the decline because people have less interpersonal trust (Putnam, 2001). Social capital, like other important predictors of political tolerance, is an individual-level phenomenon. Thus, the individual-level predictors of tolerance and intolerance are important variables to consider when assessing tolerance and the ways in can be increased or inhibited in American politics.

The important individual level predictors of political tolerance are levels of democratic values held by the individual (Sullivan et al., 1993), education (Bobo \& Licari, 1989; Nie, Junn, \& Stehlik-Barry, 1996), and perceived levels of threat (Altemeyer, 1996; Feldman \& Stenner, 1997; Stenner, 2005; Sullivan et al., 1993). When a person knows and believes in the aforementioned "rules of the game" then they often have high levels of political tolerance
that are not easily affected (Sullivan et al., 1981, 1993). These highly tolerant citizens are usually elite or involved in community activity. It is also likely that they have higher levels of education (Sullivan et al., 1993). Bobo and Licari (1989) use General Social Survey data and show that for those with higher levels of education political tolerance of even their most disliked groups is higher than for those with lower levels of education. This is the result of knowing and learning about other points of view and having to consider them, but also because through the education system students continually interact with others who may not share their values (Nie et al., 1996). Thus, people who spend time in the education system must also spend time becoming tolerant of others. However, of all these individual predictors, arguably the most important is the perception of threat (Gibson 2007).

Sullivan et al. (1993) claim that a primary trigger for decreasing political tolerance for any group is viewing that group as a threat. When threat perceptions are activated pluralistic intolerance ceases and particularized intolerance can be established (Gibson, 2007; Sullivan et al., 1993). Personality type plays an important role when the ways political tolerance can be increased or decreased when threats are perceived. Authoritarianism is shown to be activated with increased perceived threat (Altemeyer, 1996; Feldman \& Stenner, 1997; Hetherington \& Weiler, 2009), and as authoritarianism increases so does intolerance (Stenner, 2005). The factor that links each of these factors together is that they are exogenous predictors of political (in)tolerance. Human beings are often able to determine the circumstances that produce the variables affecting values like political tolerance. This is to say, there are situations where endogeneity plays a key role in explain the "spiral of tolerance" (Gibson, 2007, p. 333).

Social networks have significant effects on levels of tolerance for political out groups (Huckfeldt, Johnson, \& Sprague, 2004; Mutz, 2006). Though social networks are not completely endogenous ${ }^{1}$ people often group themselves among similarly minded people (Mutz, 2006). We know that when political discussion takes place within heterogeneous social networks, political tolerance is one of the by-products. Mutz (2006) shows that people who have

[^22]diverse social networks are more likely to have increased levels of tolerance for their political out-groups. Discussants with homogeneous networks, however, will not have higher levels of tolerance. One of the places where citizens are likely to encounter the most heterogeneity is among their coworkers (Huckfeldt et al., 2004). The important aspect of diverse social networks is political disagreement (Mutz \& Mondak, 2006). Mutz and Mondak (2006) show that in work-places where individuals are confronted with heterogeneous political ideas and values the levels of political tolerance increase. Conversely, in homogeneous work-places, political tolerance is not affected. These results mirror other work on diverse social networks and draw on earlier research on education: diversity in social settings breeds political tolerance.

### 5.3 Media and Political Tolerance

Where do media fall in our understanding of how political tolerance can be inhibited or produced? Issues of diversity in media consumption, and the ways people interact with media may perform similar functions to social networks when considering political tolerance. Perhaps those who agree with the host's point of view will have their levels of tolerance affected, but those who are ideologically different will exhibit higher levels of tolerance for their out-group. This possibility has not yet been investigated with extreme media.

Research establishes that media frames can affect levels of tolerance (Nelson, Clawson, \& Oxley, 1997). Nelson et al. (1997) focus their analysis on the frames used by media and the effect of those frames on tolerance. They show that free speech frames are effective at increasing levels of tolerance for normatively abhorrent groups such as the Ku Klux Klan. The Ku Klux Klan's capacity to present a "threat" was downplayed, and their rights as citizens (i.e., civil liberties) were used as the basis for their support. The news story produced by Nelson et al. is a straight-forward, objective journalism style of media environment. With the advent of more extreme types of television media mean that more investigation is necessary to see if these new types of media play different roles than more traditional media.

The role of selective exposure is problematic when considering the way media can affect
attitudes like tolerance. Dilliplane (2011), Iyengar and Hahn (2009), and Stroud (2008, 2010) explore selective exposure in the increasingly polarized American media environment. All three of these studies show that partisanship is a significant predictor of media selection, and they all suggest that the attitudinal and behavioral results of this process are still evolving. Mutz and Martin (2001), conversely, claim that even when taking into account the capacity for citizens to self-select into ideologically similar media, media choices are often more heterogeneous than the social networks in which citizens find themselves.

Mutz and Martin's claims notwithstanding, the literature on media effects seems to point to a new era of minimal effects (W. L. Bennett \& Iyengar, 2008b). The supposed reasons for this lay squarely with the increasingly polarized media environment (Prior, 2007). The fact is, however, that we know media can affect political tolerance under certain circumstances. What we need to know now are three things: 1) Can political tolerance affect the selection of media choice?, 2) Is political tolerance changed once viewers select into their media?, and 3) How are levels of political tolerance affected when people are randomly assigned media to watch?

### 5.4 Theory and Hypothesis

My theory is that extreme media should significantly increase tolerance for groups about whom they speak positively. Media personalities may be able to increase tolerance because they will use positive frames (Nelson et al., 1997) for those groups and issues. This will be especially pronounced for extreme media because they use their personality and political point-of-view as fodder for their content. Thus, conservative media should produce political tolerance for ideologically conservative groups. Similarly, liberal media should produce political tolerance for ideologically liberal groups. I will also test the hypothesis that conservative media decrease tolerance for liberals, and liberal media decreases tolerance for conservatives.

The experimental design is identical to the previous chapters. The treatment groups consisted of two videos showing a shortened version of Glenn Beck as seen on FOX News while the other saw shortened clips of Countdown with Keith Olbermann from MSNBC. The
clips are coded according to Sobieraj and Berry's (2011) scheme based on "outrageousness" or, as I term it, extremeness. Sobieraj and Berry define outrage as the degree and extent to which hosts on opinion based news shows or political talk radio use ad hominem attacks or hyperbolic language. I use the term extreme because these hosts present information in a state of outrage, but are extreme when compared to traditional news media. Additionally, clips of Glenn Beck and Keith Olbermann were selected for the following reasons: 1) Beck and Olbermann are noted by Sobieraj and Berry as the most outrageous hosts in their study period, and 2) both Beck and Olbermann have sufficient content on an important, salient, but not recent political topic-Arizona's immigration law.

My hypotheses are as follows:

- Hypothesis 1a: Watching extreme media will increase tolerance for those the host supports, when compared to a control group.
- Hypothesis 1b: Watching extreme media will decrease tolerance for those the host opposes, when compared to a control group.
- Hypothesis 2: Watching host using extreme language will increase political knowledge for the topics that the host discusses, when compared to a calm version of the host.
- Hypothesis 3a: Watching host using extreme language will increase tolerance for those the host supports, when compared to a calm version of the host.
- Hypothesis 3b: Watching host using extreme language will decrease tolerance for those the host opposes, when compared to a calm version of the host.


### 5.5 Data

The data were generated via a convenience-sample experimental pool at a large southeastern research university, from a mandatory course on the Introduction to American Politics. As demonstrated by the summary statistics in Table 5.1, the subjects skew toward
traditional college age, are somewhat liberal, are more likely to be women, and half the sample is non-white (Black or African-American is the most common ethnicity among minority subjects).

Table 5.1 Summary Statistics by Treatment Group, Fall 2011

| Variable | Mean | St. Dev. | Min | Max |
| :---: | :---: | :---: | :---: | :---: |
| Control Group ( $N=173$ ) |  |  |  |  |
| White | 0.421 | 0.495 | 0 | 1 |
| Black | 0.416 | 0.494 | 0 | 1 |
| Latino | 0.093 | 0.291 | 0 | 1 |
| Male | 0.41 | 0.493 | 0 | 1 |
| Age | 21.4 | 4.1 | 1 | 24 |
| Olbermann Non-Extreme ( $N=179$ ) |  |  |  |  |
| White | 0.244 | 0.43 | 0 | 1 |
| Black | 0.533 | 0.5 | 0 | 1 |
| Latino | 0.094 | 0.293 | 0 | 1 |
| Male | 0.45 | 0.498 | 0 | 1 |
| Age | 21.5 | 3.1 | 1 | 24 |
| Beck Non-Extreme ( $N=185$ ) |  |  |  |  |
| White | 0.351 | 0.478 | 0 | 1 |
| Black | 0.427 | 0.495 | 0 | 1 |
| Latino | 0.146 | 0.354 | 0 | 1 |
| Male | 0.448 | 0.498 | 0 | 1 |
| Age | 21.4 | 3.8 | 1 | 24 |
| Olbermann Extreme ( $N=187$ ) |  |  |  |  |
| White | 0.322 | 0.468 | 0 | 1 |
| Black | 0.47 | 0.5 | 0 | 1 |
| Latino | 0.154 | 0.362 | 0 | 1 |
| Male | 0.359 | 0.481 | 0 | 1 |
| Age | 20.7 | 5.4 | 1 | 24 |
| Beck Extreme ( $\mathrm{N}=186$ ) |  |  |  |  |
| White | 0.37 | 0.484 | 0 | 1 |
| Black | 0.455 | 0.499 | 0 | 1 |
| Latino | 0.121 | 0.327 | 0 | 1 |
| Male | 0.407 | 0.492 | 0 | 1 |
| Age | 21.1 | 5 | 1 | 24 |

The dependent variable for this chapter is political tolerance. I measure political tolerance using the Sullivan et al. (1993) "least-liked" coding scheme (see also Sullivan et al., 1981). There is a debate in the literature on the use of this measure, but it has demonstrated
capacity to tap into levels of political tolerance (Gibson, 2007; Sullivan \& Transue, 1999). The dependent variable was measured post-treatment with a series of multiple choice matrices. Subjects were asked to indicate their willingness (strongly agree to strongly disagree) to let specific groups "teach in public schools," "be out outlawed," "make a speech in this city," "have their phones tapped by our government," and "hold rallies in our city." The specific groups used in each matrix are the "pro-immigration movement," the "anti-immigration movement," "Conservative Arizona lawmakers,""illegal immigrants," and "United 21st Century America." These groups are specified because the policy area used in this project is Arizona's S.B. 1070. Four of these groups constitute real groups where the treatments might be able to affect tolerance, whereas "United 21st Century America" is a fake group designed to act as a base category.

### 5.6 Experimental Procedures

Subjects were offered extra credit for their participation, and were allowed to participate at their leisure for approximately one week. Most subjects were in the experimental environment for at least one and one-half hours. Subjects were randomized into one of five conditions where they were instructed to watch a video that appeared in the environment. The videos were hosted on YouTube so that they would approximate likely online viewing experiences, thus adding to external validity. There were four treatment conditions and a control group. The control group was instructed to watch a video of a bird which has been demonstrated in numerous experiments to not effect results in social science experiments.

The treatment groups consisted of two videos showing a shortened version of Glen Beck as seen on Fox News while the other saw shortened clips of Countdown with Keith Olbermann from MSNBC. The clips are coded according to Sobieraj and Berry's (2011) scheme based on "outrageousness" or extremity. Sobieraj and Berry define outrage as the degree and extent to which hosts on opinion based news shows or political talk radio use ad hominem attacks or hyperbolic language. Clips of Glenn Beck and Keith Olbermann, specifically, were selected for the following reasons: 1) neither host is currently on a widely available television
format, 2) Beck and Olbermann are noted by Sobieraj and Berry as the most outrageous hosts in their study period, and 3) both Beck and Olbermann have sufficient content on an important, salient, but not recent political topic-Arizona's immigration law. The topic of these clips is the Arizona immigration law (Senate Bill 1070) because immigration is a salient topic, but one that can likely discern between politically attentive and inattentive subjects. Furthermore, it presents characters for and against whom political tolerance is a vital issue. Not only determining the amount of tolerance toward immigrants (illegal and legal) or anti-immigrant protestors important, but knowing how media affect this issue is interesting as well.

There are four total treatment conditions: "extreme" Beck or Olbermann and "nonextreme" Beck or Olbermann. Each video was roughly three minutes and fifty seconds long, and began with the typical introduction used by the shows as they appear on television. Each video discusses the same information and uses both the host a several "cut-away" clips of other individuals. Unlike other experiments (i.e., Mutz \& Reeves, 2005), this project seeks to examine these extreme media holistically. That is to say, the effect of these shows is produced via the environment they produce by the introduction, guests, and the manner in which the hosts discuss the information. Thus, I am not able to isolate any particular aspect of the shows that contributes to any of the effects found; rather I focus on the clips themselves. By using Glenn Beck, Keith Olbermann, and YouTube I am able to gain increased external validity for this laboratory experiment. However, I am also limited in terms of the types of causal claims I can make based on these shows. For instance, I cannot isolate the particular words or phrases that contribute or inhibit increases in tolerance. This is a limitation, but it is one that is required if we want to study real-life content, which always contains multiple images and phrases. Randomization was accomplished in Qualtrics, and the display in Table 5.1 shows the summary statistics for the subjects by condition. As seen, randomization successfully balanced the subjects.

### 5.7 Results

The data results only the treatment effects are reported with $90 \%$ confidence intervals. Displayed in Figure 5.1 are the treatment effects on tolerance toward illegal immigrants. The expectation is that Olbermann - as a liberal-would increase tolerance toward these groups. Beck is expected to decrease tolerance. As shown, non-extreme Olbermann did not have a statistically significant effect against the control group. However, both Beck nonextreme and extreme mean tolerance scores are higher than the non-extreme Olbermann. Extreme Olbermann does have a statistically significant effect in the expected direction. This suggests that Olbermann's extreme discussion of the Arizona illegal immigration bill was able to increase the tolerance for illegal immigrants among subjects who saw that clip.


Figure 5.1 Treatment Effects on Tolerance for Illegal Immigrants

Figure 5.2 shows the treatment effects for anti-immigrant protesters. I hypothesize that Beck should make viewers more tolerant toward this group with extreme Beck being the most effective at increasing tolerance. As demonstrated, these results are insignificant at each treatment, but the trends show that my theory and hypothesis may be correct. Each of the Beck treatment means are higher than Olbermann or the control, but as none approach significance there is little we can say. This may be an artifact of the experimental design, so
as the design improves these results may become more substantial.


Figure 5.2 Treatment Effects on Tolerance for Anti-Immigrant Protestors

Figure 5.3 shows the results for the treatment effects on tolerance for pro-immigration protesters. By comparing the control groups it is clear that tolerance for this group is generally higher in this sample than for illegal immigrants. However, the same expectations are present here, which are that Olbermann-especially extreme Olbermann-should increase levels of political tolerance for this group. Once again, extreme Olbermann does have higher levels of tolerance than the control group. Just as before as well, none of the other three treatment groups have significant differences from the control. These effects need to be investigated further, and will be discussed in more detail in the conclusions.

The primary point garnered from these results is that there is some reason to believe that extreme media, despite claims to the contrary, may actually tolerance. Tolerance is significantly increased only for those groups with whom the hosts agree, but it is notable that there is no tolerance decreasing effect.

### 5.8 Conclusions

This project asks the question: do extreme media have significant effects on political tolerance? This research suggests that extreme media can have some effect on political


Figure 5.3 Treatment Effects on Tolerance for Pro-Immigration Protestors
tolerance in favor of the hosts preferred ideological direction, but that extreme mediain this study-do not increase intolerance. This is an important first step in expanding research on these new media. The Extreme Olbermann clip is demonstrated to increase political tolerance for Olbermann's preferred groups (illegal/undocumented immigrants and pro-immigration protestors). Beck-both extreme and non-extreme - does not show any effect, and clearly does not decrease tolerance. The literature on media effects to this point suggests that extreme media will likely decrease tolerance due to the way they discuss and present information. This research shows that those assumptions need to be revisited. Extreme media increase tolerance for the hosts preferred groups. These findings are important, but limited at this time. There are several caveats that must be taken into account with these data.

Firstly, these data are taken from a convenience sample and though these samples are routinely used, questions of political tolerance are best tested with adult Americans. Nonetheless, treatments with significant differences from the control group suggest that there is an effect taking place and more work to be done investigating the implications. The next step in the interest of external validity is to have non-student subjects for this experiment.

Next, these results are garnered from long (roughly 4 minute) clips of Glenn Beck and

Keith Olbermann. I maintain that there is something important about the presentation and affective intelligence produced by these shows, but testing the same messages via text will go farther in determining if the results are the message or the messenger. Additionally, having a broader array of clips will also help establish validity and demonstrate that the effect is not contained within the clips on immigration shown here.

The final caveat is that these pilot data only test a minimal number of hypotheses. Refining the experiment to take into account the framing of the issues for each of these media personalities will give better leverage on the questions. At this time there is little research done on the effects of these media types specifically, so this is a first step in that direction. As research becomes more common we will be able to better tell if opinionated mass media effects are indeed the same as media effects have always been, or if these new media can actually alter the way citizens engage with politics and their beliefs about politics.

## CHAPTER 6

## CONCLUSIONS

The fundamental point of this dissertation is to explore the ways in which extreme media, both on television and radio, can affect political beliefs and attitudes. The attitudes examined in this study are political knowledge, political trust, efficacy-both internal and external-and political tolerance. As demonstrated in the preceding analyses, the story concerning extreme media is more nuanced than previous described in both popular accounts of their effects and the burgeoning political science literature in this area. Fundamentally, extreme political media can encourage political knowledge. I demonstrate a correlational relationship with cross-sectional data, a bias-tested causal relationship via quasi-experimental means with propensity score matching, and with a direct causal relationship via a laboratory experiment. The effects of extreme political media on political trust and efficacy are more nuanced, as the macro-political environment is significant factor when considering effects on those attitudes. Finally, the effect of extreme political media on political tolerance here is null, which is an interesting finding, but one that certainly requires more investigation.

The crucial and over-arching theme of this project is that extreme political media are not the bane of democracy as some have tried to frame them. American media routinely point to new studies showing how some group or another who watches certain political television programs are less knowledgeable than others (see Post, 2011; Rapoza, 2011), but these claims are not rigorously tested. They have yet - before now- to be tested experimentally to demonstrate believable causality. This is not to say that there are not normatively problematic things that occur on opinionated cable news, or that everything that happens on shows like Hardball with Chris Matthews is educational. ${ }^{1}$ Indeed, it is important to stay

[^23]vigilant about the content of these media to ensure that none of them goes beyond the pale too far or too often. However, for too long, people - scholars and popular media-watchers alike - have been too willing to "throw the baby out with the bath water," so to speak.

### 6.1 Main Findings

The main findings from Chapter 2 are that entertainment is an important quality when motivated to seek out news. In an experimental setting where subjects are primed to seek out news for a benefit gained from information acquisition, entertainment and ideology are the two key factors in the thought process. Through subject interviews I am able to probe the extent to which subjects felt that their news choices were biased, and I find that those who choose ideologically similar news felt the information was not biased. However, when ideologically dissimilar news was chosen, subjects felt the information was too biased to be trusted.

In Chapter 3 I show that extreme political media can produce political knowledge. I demonstrate this finding with experimental results, with a large-N cross-sectional study using ordered probit, and with propensity score matching. Furthermore, these results are consistent across four presidential elections and two media types: television and radio. This chapter demonstrates that beyond anything else that extreme media may or may not do, at the very least they can inform the public. To this point, the political science literature has been dubious about this claim, but it has gone largely untested. By using three types of analysis I am able to successfully demonstrate the educative capacity of extreme media.

Chapter 4 takes on the effect of extreme media on political trust and efficacy. For political trust, extreme media can increase trust under some circumstances, while in other years it is associated with less political trust. The primary reason for these differential results is likely due to the general political climate. Additionally, these results generally stem from using propensity score matching with PTR as the causal variable in an era when there was divided government. Under such conditions, it is likely the case that media effects are more subtle and partially attributable to the general political zeitgeist. For efficacy,

For the last empirical chapter, Chapter 5, I find that political tolerance is not significantly affected by the experimental settings in this project. There are several possible reasons for this. One is that this project utilizes college student convenience sample. It is likely that these individuals are simple highly tolerant already. The second reason null results may be exhibited is that the video treatments are only four minutes. Future research should engage non-student samples as well as use different experimental treatments to see if political tolerance can be affected by extreme political media. In the case of this project, there are no effects, but more research is certainly in order.

### 6.2 Final Thoughts on Extreme Media

This project is the first of its kind to take a longer, more substantive look at what I term "extreme media." Research on these media continues to grow, but it is too often piece-meal, and lacks an overall look at both the types of extreme media - television and radio - as well as the range of its effects. The fundamental aim of this project is to begin opening the black box of these new media and demonstrate that they are not the bane of democracy that some have suggested they may be. Indeed, there are problematic aspects of extreme media. When Glenn Beck, for instance, is able to go on national television and call the President of the United States a racist and then meditated on his statement it is possible that he convinces some of his viewers (Reports, 2009). However, instances of such outlandish, absurd behavior are rare. ${ }^{2}$ Most of the time these hosts get on the air, do their show, and people move on with their lives. The point I am making with this project is that while doing their shows, these new media outlets and personalities serve important democratic functions just as we expect media should.

The fact is that extreme media are not all that new at all. They are new to the modern American news scene after 60 years under the norm of objectivity, but they are simply reversions back to the partisan press of the 18th, 19th and early 20th Centuries. The

[^24]partisan press played an important role for educating partisans about their candidates, issue positions, and relevant issues for debate (Schudson, 2002). Extreme media are now doing the same thing for Americans in the 21st Century. Certainly, this development is not without its own problems. As discussed throughout, extreme media may have negative externalities as well. However, the insinuation of recent research is that extreme media harken the death knell of responsible journalism in the Unites States in favor of some 'reality television' version of journalism that harms democracy. In this project, I believe I have started the process to walk those assumptions back so that scholars can take a closer look at the not-so-different media anew.

Future research should do longer term experiments in the field. Laboratory experiments, such as those presented here, certainly inform our understanding of extreme media and their effects, but field experiments are necessary if we are to get a handle on both the selection aspects and the effects of these media in the American population. Additionally, examining more than one policy area is an important step forward. In this project I focus only on immigration. While immigration is a perennially important issue, there are other issues that may exhibit different effects than the ones shown here. This should be examined. Finally, developing a measurement of "extremity" is a long-range goal that needs to be accomplished. As highlighted in Chapter 1, measures of media bias are myriad-if imperfect-but there is no standard measure of extremity. I code the clips for my experiment based on previous research and a coding scheme for language and body language. This scheme should be expanded, made more standardized, and used for other hosts regardless of their "outrage" classification. To conclude, this project shines light on a little studied, much discussed area of political media; however, with the plethora of new areas to research on extreme media, I have uncovered more questions than I could answer here. It is now the duty of political science, as a field, to continue the work that began here.

## REFERENCES

Abramowitz, A. (2010). The disappearing center: Engaged citizens, polarization, and american democracy. New Haven: Yale University Press.

Abramson, P. R., \& Aldrich, J. H. (1982). The decline of electoral participation in america. The American Political Science Review, 76(3), 502-521.

Almond, G. A., \& Verba, S. (1963). The civic culture: Political attitudes and democracy in five nations. Princeton: Princeton University Press.

Altemeyer, R. (1996). The authoritarian specter. Cambridge: Harvard University Press.
Althaus, S. L. (1998). Information effects in collective preferences. The American Political Science Review, 92(3), 545-558.

Arceneaux, K., \& Johnson, M. (2010, September). Does media choice minimize videomalaise? selective exposure and the effect of talk shows on political trust [Paper Presentation]. American Political Science Association Annual Meeting.

Arceneaux, K., Johnson, M., \& Murphy, C. (n.d.). Polarized political communication, oppositional media hostility, and selective exposure. Journal of Politics, forthcoming.

Banducci, S. A., \& Karp, J. A. (2003). How elections change the way citizens view the political system: Campaigns, media effects, and electoral change in comparative perspective. British Journal of Political Science, 33(3), 443-467.

Barker, D. C. (2002). Rushed to judgment: Talk radio, persuasion, and american political behavior. New York: Columbia University Press.

Barker, D. C., \& Knight, K. (2000). Political talk radio and public opinion. Public Opinion Quarterly, 64 (2), 149-170.

Bartels, L. M. (1996). Uninformed votes: Information effects in presidential elections. American Journal of Political Science, 40(1), 194-230.

Bartels, L. M. (2005). Homer gets a tax cut: Inequality and public policy in the american mind. Perspectives on Politics, 3(1), 15-31.

Bartels, L. M. (2007). Homer gets a warm hug: A note on ignorance and extenuation. Perspectives on Politics, 5(4), 785-790.

Baum, M. A. (2003a). Soft news and political knowledge: Evidence of absence or absence of evidence? Political Communication, 20(2), 173-190.

Baum, M. A. (2003b). Soft news goes to war: Public opinion and american foreign policy in the new media age. Princeton: Princeton University Press.

Baum, M. A., \& Jamison, A. S. (2006a). The oprah effect: How soft news helps inattentive citizens vote consistently. The Journal of Politics, 68(4), 946-959.

Baum, M. A., \& Jamison, A. S. (2006b). The oprah effect: How soft news helps inattentive citizens vote consistently. Journal of Politics, 68(4), 946-959.

Baumgartner, J., \& Morris, J. S. (2006). The daily show effect: Candidate evaluations, efficacy, and american youth. American Politics Research, 34 (3), 341-367.

Becker, S. O., \& Ichino, A. (2002). Estimating of average treatment effects based on propensity scores. The Stata Journal, 2(4), 358-377.

Bennett, S. E. (2002a). Americans' exposure to political talk radio and their knowledge of public affairs. Journal of Broadcasting \& Electronic Media, 45(4), 72-86.

Bennett, S. E. (2002b). Predicting americans' exposure to political talk radio in 1996, 1998, and 2000. The International Journal of Press/Politics, 7(1), 9-22.

Bennett, S. E. (2009). Who listens to rush limbaugh's radio program and the relationship between listening to limbaugh and knowledge of public affairs, 1994-2006. Journal of Radio $\xi^{3}$ Audio Media, 16(1), 66-82.

Bennett, S. E., Rhine, S. L., Flickinger, R. S., \& Bennett, L. L. (1999). "video malaise" revisited: Public trust in the media and government. International Journal of Press/Politics, $4(4), 8-23$.

Bennett, W. L., \& Iyengar, S. (2008a). A new era of minimal effects? the changing foundations of political communication. Journal of Communication, 58(4), 707-731.

Bennett, W. L., \& Iyengar, S. (2008b). A new era of minimal effects? the changing foundations of political communication. Political Communication(4), 707-731.

Berelson, B., Lazarsfeld, P. F., \& McPhee, W. N. (1954). Voting: A study of opinion formation in a presidential campaign. Chicago: University of Chicago Press.

Berry, J. M., \& Sobieraj, S. (2011). Understanding the rise of talk radio. PS: Political Science $\xi$ Politics, 44, 762-767.

Bobo, L., \& Licari, F. C. (1989). Education and political tolerance: Testing the effects of cognitive sophistication and target group affect. Public Opinion Quarterly, 53(3), 285-308.

Borooah, V. K. (2002). Logit and probit: Ordered and multinomial models. Thousand Oaks: Sage.

Bowler, S., \& Karp, J. A. (2004). Politicians, scandals, and trust in government. Political Behavior, 26(3), 271-287.

Brader, T. (2006). Campaigning for hearts and minds: How emotional appeals in political ads work. Chicago: University of Chicago Press.

Brader, T., Valentino, N. A., \& Suhay, E. (2008). What triggers public opposition to immigration? anxiety, group cues, and immigration threat. American Journal of Political Science, 52(4), 959-978.

Brooks, D. J., \& Geer, J. G. (2007). Beyond negativity: The effects of incivility on the electorate. American Journal of Political Science, 51(1), 1-16.

Campbell, A., Gurin, G., \& Miller, W. E. (1954). The voter decides. Oxford: Row, Peterson, and Co.

Cappella, J. N., \& Jamieson, K. H. (1997). Spiral of cynicism: The press and the public good. Oxford: Oxford University Press.

Chefets, Z. (2010, November). What rush wants, now and in 2012. Newsweek, 156(19), 34-36.

Christopher, T. (2012, November). Chris matthews: 'i'm so glad we had that storm last week-politically, $i$ should say.'. Retrieved 2012-11-08, from http://www.mediaite.com/tv/chris-matthews-im-so-glad-we-had-that-storm -last-week-politically-i-should-say/

Citrin, J. (1974). Comment: The political relevance of trust in government. The American Political Science Review, 68(3), 973-988.

Citrin, J., \& Green, D. P. (1986). Presidential leadership and the resurgence of trust in government. British Journal of Political Science, 16(4), 431-453.

Citrin, J., Green, D. P., Muste, C., \& Wong, C. (1997). Public opinion toward immigration reform: The role of economic motivations. The Journal of Politics, 59(3), 858-881.

Citrin, J., \& Luks, S. (2001). Political trust revisited: Deja vu all over again? In J. R. Hibbing \& E. Theiss-Morse (Eds.), What is it about government that americans dislike? Cambridge: Cambridge University Press.

Converse, P. E. (1964). The nature of belief systems in mass publics. In D. Apter (Ed.), Ideology and discontent. New York: Free Press.

Cook, T. E. (1998). Governing with the news: The news media as a political institution. Chicago: University of Chicago Press.

Craig, S. C., Niemi, R. G., \& Silver, G. E. (1990). Political efficacy and trust: A report on the NES pilot study items. Political Behavior, 12(3), 289-314.

Dalton, R. J., Beck, P. A., \& Huckfeldt, R. (1998). Partisan cues and the media: Information flows in the 1992 presidential election. The American Political Science Review, 92(1), 111-126.

Damasio, A. R. (1994). Descartes' error: Emotion, reason, and the human brain. New York: Quill.

Delli Carpini, M. X., \& Keeter, S. (1996). What americans don't know about politics and why it matters. New Haven: Yale University Press.

Dewey, J. (1927). The public and its problems. New York: Holt Press.
Dilliplane, S. (2011). All the news you want to hear: The impact of partisan news exposure on political participation. Public Opinion Quarterly, 75(2), 287-316.

Domke, D., McCoy, K., \& Torres, M. (1999). News media, racial perceptions, and political cognition. Communication Research, 26(5), 570-607.

Dunaway, J., Branton, R. P., \& Abrajano, M. A. (2010). Agenda setting, public opinion,
and the issue of immigration reform. Social Science Quarterly, 91 (2), 359-378.
Eysenck, M. W. (1992). Anxiety: The cognitive perspective. East Sussex: Psychology Press. Feldman, S., \& Stenner, K. (1997). Perceived threat and authoritarianism. Political Psychology, 4 (18), 741-770.

Festinger, L. (1957). A theory of cognitive dissonance. Stanford: Stanford University Press. Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. American Journal of Political Science, 29(4), 891-913.

Forgette, R., \& Morris, J. S. (2006). High-conflict television news and public opinion. Political Research Quarterly, 59(3), 447-456.

Gamson, W. A. (1968). Power and discontent. Homewood: Dorsey.
Gibson, J. L. (1992). The political consequences of intolerance: Cultural conformity and political freedom. The American Political Science Review, 86(2), 338-356.

Gibson, J. L. (2007). Political intolerance. In R. J. Dalton \& H.-D. Klingemann (Eds.), Oxford handbook of political behavior (pp. 323-341). New York: Oxford University Press.

Gilens, M. (2001). Political ignorance and collective policy preferences. The American Political Science Review, 95(2), 379-396.

Graber, D. (1988). Processing the news: How people tame the information tide. New York: Longman Press.

Graber, D. (2001). Processing politics: Learning from television in the internet age. Chicago: University of Chicago Press.

Graber, D. (2004). Mediated politics and citizenship in the twenty-first century. Annual Review of Psychology, 55, 545-571.

Groseclose, T., \& Milyo, J. (2005). A measure of media bias. The Quarterly Journal of Economics, 120(4), 1191-1237.

Habermas, J. (2006). Political communication in media society: Does democracy still enjoy an epistemic dimension? the impact of normative theory on empirical research. Communication Theory, 16, 411-426.

Hansen, G. J., \& Kim, H. (2011). Is the media biased against me? a meta-analysis of the hostile media effect research. Communication Research Reports, 28(2), 169-179.

Heckman, J. J., Ichimura, H., \& Todd, P. (1998). Matching as an econometric evaluation estimator. Review of Economics Studies, 65(2), 261-294.

Hetherington, M. J. (1998). The political relevance of political trust. The American Political Science Review, 92(4), 791-808.

Hetherington, M. J. (1999). The effect of political trust on the presidential vote. The American Political Science Review, 93(2), 311-326.

Hetherington, M. J. (2005). Why trust matters: Declining political trust and the demise of american liberalism. Princeton: Princeton University Press.

Hetherington, M. J., \& Weiler, J. D. (2009). Authoritarianism and polarization in america. Cambridge: Cambridge University Press.

Ho, D. E., Kosuke, I., King, G., \& Stuart, E. A. (2011). Matchit: Nonparametric preprocessing for parametric causal inference. Journal of Statistical Software, 42.

Ho, D. E., \& Quinn, K. M. (2008). Measuring explicit political perceptions of media. Quarterly Journal of Political Science, 3(4), 353-377.

Hofstetter, C. R., Donovan, M. C., Klauber, M. R., \& Cole, A. (1994). Political talk radio: A sterotype reconsidered. Political Research Quarterly, 47(2), 467-479.

Hofstetter, C. R., \& Gianos, C. L. (1997). Political talk radio: Actions speak louder than words. Journal of Broadcasting E Electronic Media, 41, 501.

Hollander, B. A. (1995). The influence of talk radio on political efficacy and participation. Journal of Radio Studies, 3(1), 23-31.

Hollander, B. A. (1997). Fuel to the fire: Talk radio and the gamson hypothesis. Political Communication, 14 (3), 355-369.

Hood, M. I., \& Morris, I. L. (1997). Amigo o enimigo?: Context, attitudes, and anglo public opinion toward immigration. Social Science Quarterly, 78, 309-323.

Hood, M. I., \& Morris, I. L. (1998). Give us your tired and your Poor...But make sure they have a green card: The effects of documented and undocumented migrant context on
anglo opinion toward immigration. Political Behavior, 20, 1-15.
Huckfeldt, R., Johnson, P. E., \& Sprague, J. (2004). Political disagreement: The survival of diverse opinions within communication networks. Cambridge: Cambridge University Press.

Huddy, L., Feldman, S., \& Cassese, E. (2007). The affect effect : Dynamics of emotion in political thinking and behavior (W. R. Neuman, Ed.). Chicago: University of Chicago Press.

Iyengar, S., \& Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. Journal of Communication, 59(1), 19-39.

Jamieson, K. H., \& Capella, J. N. (2010). Echo chamber: Rush limbaugh and the conservative media establishment. USA: Oxford University Press.

Jamieson, K. H., \& Cappella, J. N. (2010). Echo chamber: Rush limbaugh and the conservative media establishment. Oxford University Press.

Jerit, J., Barabas, J., \& Bolsen, T. (2006). Citizens, knowledge, and the information environment. American Journal of Political Science, 50(2), 266-282.

Jones, D. A. (1998). Political talk radio: The limbaugh effect on primary voters. Political Communication, 15(3), 367-381.

Kenski, K., \& Stroud, N. J. (2006). Connections between internet use and political efficacy, knowledge, and participation. Journal of Broadcasting \& Electronic Media, 50(2), 173-192.

Kim, Y. M., \& Vishak, J. (2008). Just laugh! you don't need to remember: The effects of entertainment media on political information acquisition and information processing in political judgment. Journal of Communication, 58(2), 338-360.

Kinder, D. R. (2003). Communication and politics in the age of information. In D. O. Sears, L. Huddy, \& R. Jervis (Eds.), Oxford handbook of political psychology (pp. 357-393). Oxford: Oxford University Press.

Klapper, J. T. (1960). The effects of mass communication. New York: Free Press.
Lau, R. R., \& Redlawsk, D. P. (2006). How voters decide: Information processing during
election campaigns. Cambridge: Cambridge University Press.
Lazarsfeld, P. F., Berelson, B., \& Gaudet, H. (1948). The people's choice: How the voter makes up his mind in a presidential campaign. New York: Columbia University Press.

Lazarus, R. S., \& Lazarus, B. N. (1994). Passion and reason: Making sense of our emotions. Oxford: Oxford University Press.

Lee, G., \& Cappella, J. N. (2001). The effects of political talk radio on political attitude formation: Exposure versus knowledge. Political Communication, 18(4), 369-394.

Levi, M., \& Stoker, L. (2000). Political trust and trustworthiness. Annual Review of Political Science, 3, 475-507.

Lippmann, W. (1922). Public opinion. New York: Free Press.
Lodge, M., McGraw, K. M., \& Stroh, P. (1989). An impression-driven model of candidate evaluation. The American Political Science Review, 83(2), 399-419.

Lupia, A., \& McCubbins, M. D. (1998). The democratic dilemma: Can citizens learn what they need to know? Cambridge University Press.

Luskin, R. C. (1990). Explaining political sophistication. Political Behavior, 12(4), 331-361.
Marcus, G. E. (2002). The sentimental citizen: Emotion in democratic politics. University Park: Penn State Press.

Marcus, G. E., \& Mackuen, M. B. (1993). Anxiety, enthusiasm, and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. The American Political Science Review, 87(3), 672-685.

Martin, A. D., \& Quinn, K. M. (2002). Dynamic ideal point esitmation via markov chain monte carlo for the U.S. supreme court, 1953-1999. Political Analysis, 10(2), 134-153.

McClosky, H. (1964). Consensus and ideology in american politics. The American Political Science Review, 58(2), 361-382.

Miller, A. H. (1974). Political issues and trust in government: 1964-1970. The American Political Science Review, 68(3), 951-972.

Morrell, M. E. (2003). Survey and experimental evidence for a reliable and valid measure of internal political efficacy. Public Opinion Quarterly, 67(4), 589-602.

Morrell, M. E. (2005). Deliberation, democratic decison-making and internal political efficacy. Political Behavior, 27(1), 49-69.

Morris, J. S. (2005). The fox news factor. The Harvard International Journal of Press/Politics, 10, 56-79.

Mutz, D. C. (1998). Impersonal influence: How perceptions of mass collectives affect political attitudes. Cambridge: Cambridge University Press.

Mutz, D. C. (2006). Hearing the other side: Deliberative versus participatory democracy. Cambridge: Cambridge University Press.

Mutz, D. C. (2007). Effects of "in-your-face" television discourse on perspectives of a legitimate opposition. The American Political Science Review, 101(4), 621-635.

Mutz, D. C., \& Martin, P. S. (2001). Facilitating communication across lines of political difference: The role of the mass media. American Political Science Review, 95(1), 97-114.

Mutz, D. C., \& Mondak, J. J. (2006). The workplace as a context for cross-cutting political discourse. The Journal of Politics, 68(1), 140-155.

Mutz, D. C., \& Reeves, B. (2005). The new videomalaise: Effects of televised incivility on political trust. The American Political Science Review, 99(1), 1-15.

Nelson, T. E., Clawson, R. A., \& Oxley, Z. M. (1997). Media framing of a civil liberties conflict and its effect on tolerance. American Political Science Review, 91 (3), 567-583.

Nie, N. H., Junn, J., \& Stehlik-Barry, K. (1996). Education and democratic citizenship in america. Chicago: University of Chicago Press.

Niemi, R. G., Craig, S. C., \& Mattei, F. (1991). Measuring internal political efficacy in the 1988 national election study. The American Political Science Review, 85(4), 14071413.

Nyhan, B., \& Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. Political Behavior, 32, 303-330.

Page, B. I., \& Shapiro, R. Y. (1992). The rational public: Fifty years of trends in americans' policy preferences. Chicago: University of Chicago Press.

Paletz, D. L. (2002). The media in american politics. New York: Longman.
Popkin, S. L. (1991). The reasoning voter: Communication and persuasion in presidential campaigns. Chicago: University of Chicago Press.

Post, H. (2009, July). Fox host glenn beck: Obama is a "Racist" (VIDEO). Retrieved 2011-04-01, from http://www.huffingtonpost.com/2009/07/28/fox-host -glenn-beck-obama_n_246310.html
Post, H. (2011). Fox news viewers know less than people who don't watch any news: Study. Retrieved 2012-01-23, from http://huff.to/Wp25q2

Prior, M. (2003). Any good news in soft news? the impact of soft news preference on political knowledge. Political Communication, 20(2), 149-171.

Prior, M. (2007). Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections. New York: Cambridge University Press.

Prothro, J. W., \& Grigg, C. M. (1963). Fundamental principles of democracy: Bases of agreement and disagreement. Journal of Politics, 22, 276-294.

Putnam, R. D. (2001). Bowling alone: The collapse and revival of american community. New York: Simon and Schuster.

Rapoza, K. (2011). Fox news viewers uninformed, NPR listeners not, poll suggests - forbes. Retrieved 2012-01-23, from http://onforb.es/ZORIBS

Redlawsk, D. P., Civettini, A. J. W., \& Emmerson, K. M. (2010). The affective tipping point: Do motivated reasoners ever "Get it?". Political Psychology, 31 (4), 563-593.

Reports, S. (2009, August). Fox host glenn beck: Obama is a "racist". Retrieved 2012-12-3, from http://www.huffingtonpost.com/2009/07/28/fox-host-glenn-beck-obama _n_246310.html

Richey, S. (2007). Manufacturing trust: Community currencies and the creation of social capital. Political Behavior, 29(1), 69-88.

Ritchie, D. A. (1998). American journalists: Getting the story. Oxford University Press.
Rosenbaum, P. R. (2002). Observational studies. Springer.
Rosenbaum, P. R., \& Rubin, D. B. (1983). The central role of the propensity score in
observational studies for causal effects. Biometrika, 70(1), 41-55.
Rosenstone, S. J., \& Hansen, J. M. (1993). Mobilization, participation, and democracy in america. New York: MacMillan.

Schudson, M. (2001). The objectivity norm in american journalism. Journalism, 2(2), 149-170.

Schudson, M. (2002). The news media as political institutions. Annual Review of Political Science, 5, 249-269.

Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. Journal of Personality and Social Psychology, 51 (3), 515-530.

Sides, J., \& Citrin, J. (2007). How large the huddled masses? the causes and consequences of public misperceptions about immigration populations. In Annual meeting of the midwest political science association. Chicago, IL.

Smith, J. A., \& Todd, P. E. (2005). Does matching overcome lalonde's critique of nonexperimental estimators? Journal of econometrics, 125(1), 305-353.

Sobieraj, S., \& Berry, J. M. (2011). From incivility to outrage: Political discourse in blogs, talk radio, and cable news. Political Communication, 28(1), 19-41.

Stenner, K. (2005). The authoritarian dynamic. Cambridge: Cambridge University Press.
Stouffer, S. (1955). Communism, conformity and civil liberties. New York: Doubleday.
Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. Political Behavior, 30(3), 341-366.

Stroud, N. J. (2010). Polarization and partisan selective exposure. Journal of Communication, $60(3), 556-576$.

Sullivan, J. L., Marcus, G. E., Feldman, S., \& Piereson, J. (1981). The sources of political tolerance: A multivariate analysis. The American Political Science Review, 75(1), 92-106.

Sullivan, J. L., Piereson, J., \& Marcus, G. E. (1993). Political tolerance and american democracy. Chicago: University of Chicago Press.

Sullivan, J. L., \& Transue, J. E. (1999). The psychological underpinnings of democracy: A select review of the research on political tolerance, interpersonal trust, and social capital. Annual Review of Psychology, 50, 625-650.

Taber, C. S., \& Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. American Journal of Political Science, 50(3), 755-769.

Teixeira, R. A. (1992). The disappearing american voter. Washington: The Brookings Institution.

Timpone, R. J. (1998). Structure, behavior, and voter turnout in the united states. The American Political Science Review, 92(1), 145-158.

Tolbert, C., \& Hero, R. (2001). Dealing with diversity: Racial/Ethnic context and social policy change. Political Research Quarterly, 54, 376-383.

Uslaner, E. M. (2002). The moral foundations of trust. Cambridge: Cambridge University Press.

Verba, S., Schlozman, K. L., \& Brady, H. E. (1995). Voice and equality: Civic voluntarism in american politics. Cambridge: Harvard University Press.

Zaller, J. (1992). The nature and origins of mass opinion. Cambridge: Cambridge University Press.

## Appendix A

## SURVEY QUESTION WORDING AND CODING

## A. 1 1996, 2000, and 2004 National Election Study

## Kowledge (2004) ${ }^{1}$

"Now we have a set of questions concerning various public figures. We want to see how much information about them gets out to the public from television, newspapers and the like."
"The first name is Dennis Hastert. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Dick Cheney. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Tony Blair. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"William Rehnquist. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Not looking at the booklet now. Do you happen to know which party had the most members in the House of Representatives in Washington BEFORE the election (this/last) month?"
$1=$ Correct (Republicans), $0=$ Incorrect (Democrats)
"Do you happen to know which party had the most members in the U.S. Senate BEFORE the election (this/last) month?"
$1=$ Correct (Republicans), $0=$ Incorrect (Democrats)
2000
"The first name is Trent Lott. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"William Rehnquist. What job or political office does he NOW hold?"

[^25]$1=$ Correct, $0=$ Incorrect
"Tony Blair. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Janet Reno. What job or political office does she NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Do you happen to know which party had the most members in the House of Representatives in Washington BEFORE the election (this/last) month?"
$1=$ Correct (Republicans), $0=$ Incorrect (Democrats)
"Do you happen to know which party had the most members in the U.S. Senate BEFORE the election (this/last) month?"
$1=$ Correct (Republicans), $0=$ Incorrect (Democrats)

## 1996

"The first name is Al Gore. What job or political office does he now hold?"
$1=$ Correct, $0=$ Incorrect
"William Rehnquist. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Boris Yeltsin. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Newt Gingrich. What job or political office does he NOW hold?"
$1=$ Correct, $0=$ Incorrect
"Do you happen to know which party had the most members in the House of Representatives in Washington BEFORE the election (this/last) month?"
$1=$ Correct (Republicans), $0=$ Incorrect (Democrats)
"Do you happen to know which party had the most members in the U.S. Senate BEFORE the election (this/last) month?"
$1=$ Correct (Republicans), $0=$ Incorrect (Democrats)

## Radio

"There are a number of programs on radio in which people call in to voice their opinions
about politics. Do you ever listen to political talk radio programs of this type?"
$1=$ Yes; $0=$ No

## Income ${ }^{2}$

" $[\mathrm{T}]$ ell me the letter of the income group that includes the income of all members of your family living here in $[$ YEAR $=1995,1999$, or 2003] before taxes. This figure should include salaries, wages, pensions, dividends, interest, and all other income."

1. A. NONE OR LESS THAN $\$ 4,999 ; 2$ B. $\$ 5,000-\$ 9,9993 ; 3$ C. $\$ 10,000-\$ 14,999 ; 4$. D. $\$ 15,000-\$ 24,999 ; 5$ E. $\$ 25,000-\$ 34,999 ; 6$ F. $\$ 35,000-\$ 49,999 ; 7$ G. $\$ 50,000-\$ 64,999 ; 8$ H. $\$ 65,000-\$ 74,999 ; 9$. J. $\$ 75,000-\$ 84,999 ; 10$. K. $\$ 85,000-\$ 94,999 ; 11$. M. $\$ 95,000-\$ 104,999 ; 12$. N. $\$ 105,000-\$ 114,999 ; 13 . ~ P . ~ \$ 115,000-\$ 124,999 ; 14$. Q. $\$ 125,000-\$ 134,999 ; 15$. R. $\$ 135,000-$ $\$ 144,999 ; 16$. S. $\$ 145,000-\$ 154,999 ; 17$. T. $\$ 155,000-\$ 164,999 ; 18 . U . \$ 165,000-\$ 174,999 ; 19$. V. $\$ 175,000-\$ 184,999 ; 20$ W. $\$ 185,000-\$ 194,999 ; 21$. X. $\$ 195,000-\$ 199,999 ; 22$ Y. $\$ 200,000$ and over

## Education

"What is the highest grade of school or year of college you have completed? Did you get a high school diploma or pass a high school equivalency test? What is the highest degree that you have earned?"

1. 8 grades or less and no diploma or equivalency; 2. 9-11 grades, no further schooling (incl. 12 years without diploma or equivalency) ; 3. High school diploma or equivalency test ; 4. More than 12 years of schooling, no higher degree; 5. Junior or community college level degrees (AA degrees) ; 6. BA level degrees; 17+ years, no advanced degree ; 7. Advanced degree, including LLB

## Age

"Age was calculated by subtracting the year of birth from [YEAR: 1996, 2000, 0r 2004]. For cases where $R$ refused to give year of birth or year of birth was NA in the survey variable, a check was made of Household listing information: if age of R was included in the Household

[^26]listing, it was included here from the Household listing."
Codes: 17-97, with $97=97$ and older

## Male

$R$ 's sex is...
$1=$ Male; $0=$ Female

## White

"What racial or ethnic group or groups best describes you?"
$1=$ White; $0=$ All other

## Ideology

"When it comes to politics, do you usually think of yourself as extremely liberal, liberal, slightly liberal, moderate or middle of the road, slightly conservative, conservative, extremely conservative, or haven't you thought much about this?"
$0=$ Moderate; $1=$ Slightly liberal or conservative; $2=$ Liberal or Conservative; $3=$ Extremely Liberal or Conservative

## National TV

"How many days in the past week did you watch the national network news on TV?"
$0-7$, coded as in NES

## Local TV

"How many days in the past week did you watch the local TV news shows such as "Eyewitness News" or "Action News" in the late afternoon or early-evening?"
0-7, coded as in the NES

## Newspaper

"How many days in the past week did you read a daily newspaper?"
0-7, coded as in the NES

## Attention to Politics

"Some people don't pay much attention to political campaigns. How about you? Would you say that you have been VERY MUCH interested, SOMEWHAT interested or NOT MUCH interested in the political campaigns so far this year?"
$0=$ not much, $1=$ somewhat interested, $2=$ very much interested

## A. 22008 National Annenberg Election Survey

Knowledge "Who has the final responsibility to determine if a law is constitutional or not? Is it the president, the Congress, or the Supreme Court? [Probe if don't know: Anything come to mind?]"
$0=$ President, $0=$ Congress, $1=$ Supreme Court
"How much of a majority is required for the US Senate and House to override a presidential veto? [Probe if don't know:] Anything come to mind?"
$1=$ Two-thirds, $0=$ Other
"Do you happen to know which party has the most members in the United States House of Representatives? [Probe if don't know:] Anything come to mind?"
$1=$ Democratic, $0=$ Republican
"To the best of your knowledge, do you happen to know how Supreme Court justices are chosen? Are they nominated by a nonpartisan congressional committee, elected by the American people, nominated by the president and then confirmed by the Senate, or appointed if they receive a two-thirds majority vote of the justices already on the court? [Probe if don't know:] Anything come to mind?"
$0=$ Nominated by congressional committee, $0=$ elected, $1=$ Nominated by President and confirmed by Senate, $0=$ Appointed by two-thirds of justices

## Radio

This variable is constructed based on two NAES variables. The first is an indicator of listening to radio, the second confirms that the respondent listens to conservative talk radio. If a respondent claims to listen to a host in bold they are coded as "1" with all other respondents being " 0 ."
"Thinking about the past week, how many days did you hear information about the 2008 presidential campaign on radio shows that invite listeners to call in to discuss current events, public issues, or politics? This includes hearing the shows on the radio, or on the Internet,
your cell phone, iPod, or PDA."
$0=0$
$1=1-7$ (indicates a listener)

## Income

"Last year, what was the total income before taxes of all the people living in your house or apartment? Just stop me when I get to the right category [read response options 1-9]:" $1=$ Less than $\$ 10,000 ; 2=\$ 10,000$ to less than $\$ 15,000 ; 3=\$ 15,000$ to less than $\$ 25,000 ;$ $4=\$ 25,000$ to less than $\$ 35,000 ; 5=\$ 35,000$ to less than $\$ 50,000 ; 6=\$ 50,000$ to less than $\$ 75,000 ; 7=\$ 75,000$ to less than $\$ 100,000 ; 8=\$ 100,000$ to less than $\$ 150,000 ; 9=\$ 150,000$ or more

## Education

"What is the last grade or class you completed in school?"
$1=$ Grade 8 or lower $1=$ Some high school, no diploma, $1=$ High school diploma or equivalent, $2=$ Technical or vocational school after high school, $2=$ Some college, no degree, $2=$ Associate's or two-year college degree, $4=$ Four-year college degree, $4=$ Graduate or professional school after college, no degree, $4=$ Graduate or professional degree

## Age

"What is your age?"
18-97, $97=97$ or older

## Male

Respondent's sex?
$1=$ Male, $0=$ Female
White "What is your race? Are you white, black or African American, Asian, American Indian, or some other race? [If Hispanic:] Are you white Hispanic, black Hispanic, or some other race?"
$1=$ White, or white Hispanic; $0=$ all other (Black, African American, or black Hispanic, Asian, American Indian, Hispanic w/ no race given, mixed race, or other)

## Ideology

This is a folded ideology scale to assess the degree to which strongly ideological people gain knowledge. There should be no difference with regard to the direction of their ideology. "Generally speaking, would you describe your political views as very conservative, somewhat conservative, moderate, somewhat liberal, or very liberal?"
$0=$ Moderate; $1=$ Somewhat liberal or conservative; $2=$ Very liberal or conservative

## Television

"Thinking about the past week, how many days did you see information on broadcast or cable television about the 2008 presidential campaign? This includes seeing programs on television, on the Internet, your cell phone, iPod, or PDA."

0-7, matches NAES code

## Newspaper

"Thinking about the past week, how many days did you read a newspaper for information about the 2008 presidential campaign? This includes reading a paper copy of the newspaper, an online copy, or a newspaper item downloaded on your cell phone, iPod, or PDA."

0-7, matches NAES code

## Attention to Politics

"How closely are you/did you follow the 2008 presidential campaign: very closely, somewhat closely, not too closely, or not closely at all?"
$0=$ not closely, $1=$ not too closely, $2=$ somewhat closely, $3=$ very closely

## Appendix B

## MATCHING MODEL SPECIFICATIONS AND BALANCE

Table B. 1 Propensity Score Blocks and Balance for 1996 NES

| Inf. Block of P-Score | Radio (treatment) |  |  |
| :---: | :---: | :---: | :---: |
|  | 0 | Total |  |
| 0 | 342 | 128 | 470 |
| 0.2 | 166 | 49 | 215 |
| 0.3 | 179 | 106 | 285 |
| 0.4 | 215 | 230 | 445 |
| 0.6 | 51 | 66 | 117 |
| 0.8 | 1 | 0 | 1 |
| Total | 954 | 579 | 1533 |

Note: This table shows the inferior bound, the number of treated and treated and the number of controls for each block for 1996.
Matched observables are Radio, Income, Education, Male, White, Ideological,Nat TV, Local TV, and Attn. to Politics.

Table B. 2 Propensity Score Blocks and Balance for 2000 NES

| Inf. Block of P-Score | Radio (treatment) |  |  |
| :---: | :---: | :---: | :---: |
|  | 0 | Total |  |
| 0 | 387 | 122 | 509 |
| 0.2 | 128 | 35 | 163 |
| 0.3 | 119 | 59 | 178 |
| 0.35 | 85 | 68 | 153 |
| 0.4 | 245 | 217 | 462 |
| 0.6 | 30 | 60 | 90 |
| Total | 994 | 561 | 1555 |

Note: This table shows the inferior bound, the number of treated and treated and the number of controls for each block for 2000.
Matched observables are Radio, Income, Education, Male, White,
Ideological, Nat TV,_L_Cal TV,_and_Attn_to_Politics

Table B. 3 Propensity Score Blocks and Balance for 2004 NES

| Inf. Block of P-Score | Radio (treatment) |  |  |
| :---: | :---: | :---: | :---: |
|  | 0 | Total |  |
| 0 | 245 | 111 | 356 |
| 0.2 | 139 | 65 | 204 |
| 0.4 | 143 | 141 | 284 |
| 0.6 | 68 | 144 | 212 |
| 0.8 | 0 | 10 | 10 |
| Total | 595 | 471 | 1066 |

Note: This table shows the inferior bound, the number of treated and treated and the number of controls for each block for 2004.
Matched observables are Radio, Income, Education, Male, White, Ideological, Nat TV, Local TV, and Attn to Politics.

Table B. 4 Propensity Score Blocks and Balance for 2008 NAES

| Inf. Block of P-Score | Radio (treatment) |  |  |
| :---: | :---: | :---: | :---: |
|  | 0 | Total |  |
| 0 | 929 | 529 | 1458 |
| 0.2 | 394 | 156 | 550 |
| 0.3 | 429 | 166 | 595 |
| 0.35 | 511 | 511 | 793 |
| 0.4 | 554 | 554 | 969 |
| 0.45 | 505 | 505 | 994 |
| 0.5 | 698 | 901 | 1599 |
| 0.6 | 214 | 321 | 535 |
| Total | 4,234 | 3,259 | 7,493 |

Note: This table shows the inferior bound, the number of treated and treated and the number of controls for each block for 2008. Matched observables are Radio, Income, Education, Male,White,_Ideological,Nat TV, and Attn. to Politics.

## Appendix C

## VIDEO TREATMENT SCRIPTS

*** Countdown intro music and graphics ${ }^{* * *}$ (0:00-0:06)
Olbermann: Good evening from New York; significant developments from Pima County in embattled Arizona. The Sherriff of that jurisdiction, bordering Mexico, including the city of Tucson, saying in our fifth story on the Countdown that he has no intention...(0:07-0:18)
${ }^{* * *}$ Graphic of state of Arizona with AZ flag and words "Racist, Disgusting, \& Unnecessary" behind Olbermann***

Olbermann continued: ...of enforcing a law that he considers racist, disgusting, unnecessary. As at least three Arizona cities plus the Federal government contemplate lawsuits to block the so-called breathing while Latino law, Pima County Sherriff, Clarence Dupnik, joins us in a moment. (0:18-0:33)
${ }^{* * *}$ Cut to video of Jan Brewer signing a bill ${ }^{* * *}$
Olbermann continued: On the defensive, Arizona governor, Jan Brewer, taking a page out of the Palin playbook turning to her Facebook page to lash out at critics and rationalize the immigration law quoting the governor...(0:33-0:42)
${ }^{* * *}$ Cut to Facebook graphic, Olbermann reading text of Facebook post seen on screen ${ }^{* * *}$
"On Friday, I signed into law Senate Bill 1070. Since then I have come under fire from President Obama, Mayor Phil Gordon of Phoenix, the liberal east coast media, Al Sharpton and others who want us to back down from securing our boarders. Rest assured, we will not back down until our borders are secure." (0:42-1:00)
***Back to Olbermann, Picture of Tom Ridge behind ${ }^{* * *}$
Olbermann continued: Even though nobody told her not to. President Bush's Homeland Security Secretary, Tom Ridge, who may know something about securing borders, telling
the Associated Press he's uncomfortable with Arizona's new law saying it allows police to question people without probable cause...(1:01-1:15
${ }^{* * *}$ Cut to clip of Congressman Hunter, CA-R in House Chamber***
...and the son of former Congressman Duncan L. Hunter, who succeeded his father representing the California 52 nd now saying he would support the deportation of naturalborn American citizens if they were born to undocumented immigrants on the grounds that they cost too much and because their souls are insufficiently American. (1:15-1:35)
*** Cut to clip of Rep. Hunter***
Hunter (in video): We spend between 10 and 20 billion dollars in this state that we spend on illegal immigration. Like he said that's health services, education, and jails. We just can't afford it anymore. That's it. We're not being mean, we're just saying it takes more than walking across the border to become an American citizen. It's what's in our souls. (1:35-1:57)
***Back to Olbermann***
Olbermann: Congressman Hunter, whose father once pointed to the glazed chicken as proof of the good treatment at Gitmo, is proposing overturning the part of the United States Constitution that conservatives are so fond of citing as defense against liberal tyranny. (1:58 - 2:12)
*** Cut to image of Amendment XIV, Section 1-text***
Olbermann (reading text): The 14th Amendment, section 1, all persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States nor shall any state deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws. (2:13-2:36)
*** Cut back to Olbermann***
Olbermann: In Washington, Senators Menendez, Schumer, and Reid saying today they will keep drafting immigration overhaul bill despite the fact that Republican Lindsey Gra-
ham has pulled out of negotiations. Congresswoman Shelia Jackson-Lee, saying today that Graham's defection and promise to block immigration reminded her of the southern Dixiecrats who attempted to block civil rights legislation during the 1960s. Mrs. Jackson-Lee and other House Democrats taking to the capitol steps today to condemn the Arizona law calling for steps to fix it. (2:37-3:03)
${ }^{* * *}$ Cut to clip of House Democrats with Microphones at the Capitol ${ }^{* * *}$
Lydia Velazquez, (D): This bill will not make our borders more secure, but it will open the door to discrimination and racial profiling. It panders to the worst elements of our national dialogue. (3:03-3:21)

Barbara Lee (D): It is really a national disgrace-a national disgrace-that will result in people being harassed simply because of how they look, and as an African-American I can tell you that this opens the floodgates to racial profiling and to many, many, many of the issues that we had to deal with during the civil rights struggle. Allowing law enforcement officials to arbitrarily stop anyone, anyone and challenge their citizenship is not only wrong, but it's un-American. (3:21-3:55)
***END OLBERMANN TREATMENT CLIP*** Beck Treatment
***Beck intro music and graphics*** (0:00-0:08)
Beck: President Obama said this about this legislation just the other day. (0:08-0:14)
${ }^{* * *}$ Cut to clip of President Obama, with Beck standing in front of screen in shot***
President Obama: This law that just passed in Arizona, which I think is a poorly conceived law. (0:14-0:21)
***End Clip of President Obama, back to Beck***
Beck: Hummm, poorly conceived law. He would have been right if anything like the law he described actually existed. Um, this is how he summarized his worry for Hispanic Americans. (0:22-0:34)
${ }^{* * *}$ Cut to clip of President Obama, with Beck standing in front of screen in shot ${ }^{* * *}$
President Obama: Now suddenly, if you don't have your papers and you took your kid out to get ice cream, you're going to be harassed. (0:34-0:43)
${ }^{* * *}$ End Clip of President Obama, back to Beck***
Beck: Yeah, then there's going to be a doctor who's going to remove your feet and take your kids' tonsils out. Ahh, I mean if you're here, you know, legally, illegally, you're sitting at an ice cream parlor they cannot ask you any questions by law. (0:43-0:58)
***Graphic behind Beck of state of Arizona with words "AZ Senate Bill 1070"***
Beck continued: The law specifically prohibits such behavior. Enforce that law. It applies to, to so many circumstantial limitations that it's hard to imagine how systematic abuse is even possible. Law enforcement will make a reasonable attempt to determine the immigration status of a person when practicable if there is a reasonable suspicion, if it does not hinder or obstruct an investigation, or if they have already been arrested. However, the law states, race, color, or national origin cannot be the only reason they were asked. Furthermore, any such interactions must be permitted by the United States or the Arizona Constitution. It must be implemented in a manner consistent with federal laws regulating immigration, it must provide the civil rights of all persons, and the questioning must occur during a lawful contact. (0:58-1:58)
***Graphic behind Beck with words "Lawful Contact"***
Beck continued: That doesn't sound like the ice cream parlor. What does lawful contact even mean? According to the University of Missouri-Kansas City law school professor who helped draft the law it means, quote, the officer is already engaged in some sort of detention of an individual because he has violated some other law. The most likely context would be that this law would come into play at a traffic stop. Arizona is in the midst of clarifying this even further just to announce that their cops are not racists. So, unless your mythical trip to the ice cream stand... (1:59-2:35)
${ }^{* * *}$ Graphic gone, Beck alone ${ }^{* * *}$
Beck continued: ...involves reckless driving or armed robbery, you're probably going to be okay with your mint chocolate chip waffle cone there with your grandkids. The larger point, however, is that those who attack this law are making very specific complaints...(2:36 - 2:50)
${ }^{* * *}$ Video of protestors plays in background as Beck continues; Signs say "Veto SB 1070"***

Beck continued: ... about very specific groups people. It's not about these people [points to protestors in video screen], it's not about the T.E.A. parties, or the anybody. It's not. Whom would be perpetrating this abuse? No critic is claiming that Republican politicians are going to start making citizen arrests, or T.E.A. party members-oh, you're Hispanic let me arrest you. (2:51-3:11)
***Video of police stock footage behind Beck***
Beck continued: That's not happening. What they are saying is that police officers will abuse their powers to recklessly harass and detain Hispanic citizens for no reason other than living while Hispanic. Why can we trust the police officers to make judgments on the use of lethal force, but not ask for identification when appropriate? They are carrying guns. It's been my experience that police officers-and I think most people in America-along with members of the military, police and members of the military represent the finest among us. Not in every case. There are bad cops. There are bad...there are bad everything. (2:123:50)
***Beck alone, no graphic behind ${ }^{* * *}$
Beck continued: But the vast majority are just Americans; they're good. They're people that risk their life every day to protect us. (3:50-3:56)
***END BECK TREATMENT CLIP***

## Appendix D

## EXTREME TREATMENT MENTIONS AND NAES "EXTREME" VARIABLE CODING

Table D. 1 Experimental Treatment Explicit Mentions for Knowledge Questions

|  | Treatment Condition |  |
| :---: | :---: | :---: |
| Question | Olbermann | Beck |
| Name of State | 2 | 3 |
| Bills Name or Number | 1 | 2 |
| Papers | 1 | 3 |
| Party | 1 | 1 |

Question: Question EB02_c: "In the past week, from what television program did you get most of your information about the 2008 presidential campaign?" Partisan coding follows Dilliplane (2011).

Table D. 2 Media Coding

| Non-Extreme Conservative Media |
| :---: |
| FOX News (unspecified) |
| Fox Report with Shepard Smith |
| Special Report with Brit Hume |
| Your World with Neil Cavuto |

Non-Extreme Liberal Media
Anderson 360
Headline News
MSNBC (unspecified)
Nightline
Situation Room with Wolf Blitzer

| Non-Partisan Media |
| :---: |
| ABC (unspecified) |
| ABC World News |
| CBS (unspecified) |
| CBC (unspecified) |
| CBS Evening News |
| CNN (unspecified) |
| Larry King Live |
| Local News |
| Lou Dobbs Tonight |
| Meet the Press |
| Nancy Grace |
| NBC (unspecified) |
| NBC Nightly News |
| NewsHour with Jim Lehrer |
| On the Record with Greta Van Susteren |
| PBS (unspecified) |
| 7o0 Club |
| Today Show |

Table D. 3 Media Coding, continued

| Extreme Media (1) |
| :---: |
| Countdown with Keith Olbermann |
| Glenn Beck |
| Hannity and Colmes |
| Hardball with Chris Matthews |
| The OReilly Factor |
| Non-Extreme Media (0) |
| ABC (unspecified) |
| ABC World News |
| CBS (unspecified) |
| CBC (unspecified) |
| CBS Evening News |
| CNN (unspecified) |
| Larry King Live |
| Local News |
| Lou Dobbs Tonight |
| Meet the Press |
| Nancy Grace |
| NBC (unspecified) |
| NBC Nightly News |
| NewsHour with Jim Lehrer |
| On the Record with Greta Van Susteren |
| PBS (unspecified) |
| 7oo Club |
| Today Show |
| FOX News (unspecified) |
| Fox Report with Shepard Smith |
| Special Report with Brit Hume |
| Your World with Neil Cavuto |
| Anderson 360 |
| Headline News |
| MSNBC (unspecifined) |
| Mituation Room with Wolf Blitzer |

## Appendix E

## PRINCIPLE COMPONENT ANALYSIS

| Principal compone Rotation: (unction | Correlation |  | Number of obs <br> Number of comp. <br> Trace <br> Rho | $\begin{array}{lr} = & 614 \\ = & 5 \\ = & 5 \\ =1.000 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| Corrponent | Eigenvalue | Difference | Proportion | Cumulative |
| Compl | 1.79813 | . 163017 | 0.3596 | 0.3596 |
| Comp2 | 1.03511 | . 129576 | 0.2070 | 0.5666 |
| Comp3 | . 905538 | . 201751 | 0.1811 | 0.7778 |
| Comp4 | . 703787 | . 146358 | 0.1408 | 0.8885 |
| Comps | . 554429 | , | 0.1115 | 1.000 |

Principal components (eigenvectors)

| variable | compl | comp2 | comp3 | comp4 | comps | Unexplained |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| state | 0.5033 | 0.0558 | -0.2393 | -0.7633 | 0.2933 | 0 |
| breveren | 0.5608 | -0.2598 | 0.2401 | 0.000 | -0.1485 | 0 |
| number | 0.5243 | -0.3146 | 0.2417 | 0.4815 | 0.57596 | 0 |
| party | 0.3443 | 0.4925 | -0.6620 | 0.3301 | -0.1253 | 0 |
| papers | 0.1461 | 0.1667 | 0.6232 | -0.0231 | 0.0433 | 0 |

Figure E. 1 Principle Component Analysis for Political Knowledge


[^0]:    ${ }^{1}$ Editorial persons and/or staff can come in many forms. Walter Cronkite, for instance, did not have an overly large involvement or even the final say on the editorial staff at CBS when he began as the anchor for their nightly newscasts. However, as he gained more control over the CBS newsroom, he gradually came to be the final say on all editorial decisions. Thus, the frame of the news on CBS gradually became the frame Cronkite personally wanted (Ritchie, 1998). Similarly, in news papers, non-objective editorials are clearly marked in their own section outside of the objective news (Cook, 1998; Schudson, 2001).

[^1]:    ${ }^{2}$ Barker (2002) tests political trust among Rush Limbaugh listeners. The problem is that Barker's work

[^2]:    is based only on Rush Limbaugh, and is now dated. Thus, new work is needed to test newer media and media personalities.
    ${ }^{3}$ I define "mainstream" media as the newscast proper on ABC, NBC, CBS, Fox, CNN, or MSNBC. Talent-driven programming such as Sean Hannity, Rachel Maddow, or Ed Shultz is defined as biased.
    ${ }^{4}$ Dalton et al. use news reports, editorial reports, and nightly television reports. These are commonly understood as bastions of "objective press." These will not be the foci of this project.

[^3]:    ${ }^{5}$ CurrentTV, HD Net, and Al Jazeera are but three of the newer news organizations Americans might encounter. Each of these networks prides themselves on investigative journalism, which may increase their market share in the coming years. Additionally, CurrentTV is direct in their message that they are a left-ofcenter news organization as emphasized in the hiring of Keith Olbermann after his departure from MSNBC, and the hiring of liberal politicans like Jennifer Granholm and Elliot Spitzer.

[^4]:    ${ }^{1}$ All of the subjects are anonymous, and their statements are taken verbatim from the on-line study environment.

[^5]:    ${ }^{1}$ Sobieraj and Berry (2011) use the term "outrageous" to describe these media. I feel that term does not encompass a positional reference for these media compared to the more traditional evening broadcast news. These new shows (i.e., Countdown with Keith Olbermann, Glenn Beck, or The Rachel Maddow Show are in direct competition with the evening news, and therefore should be explained in reference to them. Compared to the evening news or even shows like The Situation Room, these shows are extreme.

[^6]:    ${ }^{2}$ Please see Web Appendix C for a full transcript.

[^7]:    ${ }^{3}$ The mean for Political Knowledge as a raw scale is 2.96 with a 1.23 standard deviation.

[^8]:    ${ }^{4}$ By "general political knowledge" I mean the traditional Delli Carpini and Keeter-type (1996) civic-based

[^9]:    factual knowledge. I measure pre-test general political knowledge with the following questions: 1) For how many years is a United States Senator elected-that is, how many year are there in one full term of office for a U.S. Senator?, 2) For how many years is a member of the United States House of Representatives elected-that is, how many years are there in one full terms of office for a U.S. House member?, 3) Who is the current prime minister of the United Kingdom?, 4) In which chamber of Congress do Republicans have a majority?, and 5) Do you happen to know many times an individual can be elected President of the United States under current laws?
    ${ }^{5}$ The dataset can be accessed at this website: http ://www.annenbergpublicpolicycenter.org.

[^10]:    ${ }^{6}$ The questions used by the NAES-following Delli Carpini and Keeter (1996)-are 1) Who has the final responsibility to determine is a law is Constitutional?, 2) How much of a majority is required for the U.S. Senate and House of Representatives to override a presidential veto?, 3) Do you happen to know which party has the most members in the House of Representatives?, and 4) To the best of your knowledge, do you happen to know how Supreme Court justices are chosen? Are they nominated by a nonpartisan congressional committee, elected by the American people, nominated by the president and then confirmed by the Senate, or appointed if they receive a two-thirds majority vote of the justices already on the court?

[^11]:    ${ }^{7}$ Glenn Beck, Bill O'Reilly, Sean Hannity, and Lou Dobbs are considered "extreme" conservatives, while Chris Matthews and Keith Olbermann are the "extreme" liberals. These coding decisions follow Dilliplane (2011).

[^12]:    ${ }^{8}$ Due to the differences in the time periods when the questions were asked, I am forced to drop a considerable amount of observations. However, for the NAES concerns about these missing observations are mitigated because of the sampling method employed. Each of their monthly polls were validated, so I can be reasonably sure that though I am forced to use mostly the respondents from the end of the polling period that these data reflect a random sample.

[^13]:    ${ }^{9}$ S. E. Bennett (2002a) predicts PTR listenership, thus I take the most important variables from his models. Importantly, these variables also predict political knowledge.

[^14]:    ${ }^{10}$ These methods are nearest neighbor, kernel, stratified, or exact matching. I use kernel matching with bias-corrected bootstrapped standard errors because it requires more stringent assumptions about the matches, and thus is less likely to generate a Type I error.

[^15]:    ${ }^{11}$ Arceneaux and Johnson (2010) cite Smith and Todd (2005) when outlining these criteria as they undertake a similar study testing matching as a method.

[^16]:    ${ }^{12}$ The ROC curves range from .6358 to .6688 . These model fits match S. E. Bennett (2002a) who uses NES data to predict PTR audiences from the mid-1990s. Even the smallest significant effect, 2008, was maintained after testing for sensitivity.

[^17]:    ${ }^{1}$ The full question wording and coding scheme is in Appendix A.

[^18]:    ${ }^{2}$ For internal efficacy the question are as if one has "a say" in what government does and if government "cares" about the respondent's thoughts.
    ${ }^{3}$ For the 2004 NES, the external efficacy scale is robust. I estimated matching models on all of the question, including the scale itself, and for all the dependent variables PTR is positive and significant. For simplicity and similarity I only use the "have a say" question.

[^19]:    ${ }^{4}$ The significance of treatment effects is noted in two ways. The t-test, if greater than 1.96 , indicates a significant difference, but I have also made the significant effects bold.

[^20]:    ${ }^{5}$ These hosts are described in the previous chapter. As a reminder they are Bill O'Reilly (C), Chris Matthews (L), Sean Hannity (C), Keith Olbermann (L), and Glenn Beck (C).

[^21]:    ${ }^{6}$ Curiously, the 2004 NES time-series study does not have internal efficacy questions on the survey.

[^22]:    ${ }^{1}$ You may choose your friends, for instance, but you cannot necessarily choose your co-workers.

[^23]:    ${ }^{1}$ Glenn Beck made headlines in the summer of 2009 with his accusations of President Barack Obama being a racist (Post, 2009). Chris Matthews has also made news with extreme comments concerning the political benefits of Hurricane Sandy (Christopher, 2012). The point is despite these obviously uninformative and biased statements, these shows still inform and serve a public good function.

[^24]:    ${ }^{2}$ In an attempt to discuss while not conflating, during the Bush Administration Keith Olbermann had a penchant for drawing conservative ire by calling President Bush a war profiteer and a liar for his administration's policies in Iraq. So, outlandish comments go both ways-conservative and liberal.

[^25]:    ${ }^{1}$ Question wording is the same across all years unless otherwise noted.

[^26]:    ${ }^{2}$ Though the categories for the 1996 survey do not match these exactly, they were re-coded to match these categories as closely as possible.

