

Blocking the Bias: Testing the Effectiveness of Affirmatory Messaging at Reducing
Directionally Motivated Reasoning

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Elizabeth Emma Housholder

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Table of Contents

Acknowledgements	i
List of Tables	iv
List of Figures	v
Chapter I: Literature Review	1
Motivated reasoning.....	6
The consequences of motivated reasoning.....	7
Overcoming motivated reasoning.....	17
A psychological basis for motivated reasoning.....	21
Self-esteem.....	24
The role of affirmation.....	31
Operationalizing self-affirmation.....	33
Two-sided advertising.....	34
Chapter II: Operationalizing Affirmatory Messages	37
Pilot test one.....	46
Pilot test two.....	51
Pilot test three.....	52
Chapter III: Experiment One	55
Method.....	55
Results.....	64
Discussion.....	73
Chapter IV: Designing the Second Experiment	79
Pilot test one: Choosing issues.....	82
Pilot testing the stimuli.....	93
Chapter V: Experiment Two	100
Pre-test Method.....	101
Pre-test: Choosing participants for the full experiment.....	103
Method.....	105
Results.....	108
Discussion.....	118
Chapter VI: Discussion	122
Affirmatory messaging and political advertising.....	122
The role of self-esteem.....	124
The effectiveness of affirmatory messaging.....	128
Implications for theory.....	130
Implications for practitioners.....	133

Limitations.....	136
Future research.....	139
Appendices.....	158
Appendix A. Experiment One, Pilot Test 1: Original Stimuli.....	158
Appendix B. Experiment One, Pilot Test Questionnaire.....	162
Appendix C. Experiment One, Final Stimuli.....	165
Appendix D. Candidate Biographies and Full Issue Positions.....	169
Appendix E. Experiment One Questionnaire.....	173
Appendix F. Experiment Two, Pilot One Questionnaire.....	186
Appendix G. Experiment Two, Stimuli Pilot One: Stimuli.....	201
Appendix H. Experiment Two, Stimuli Pilot 1: Questionnaire.....	205
Appendix I. Experiment Two, Stimuli Pilot Three.....	208
Appendix J. Experiment Two Questionnaire.....	209

List of Tables

Table 1. Potential Argument Combinations in Two-Sided Messages.....	39
Table 2. Experiment One, Pilot Test One Results.....	50
Table 3. Condition descriptions for Experiment One.....	56
Table 4. Source Credibility Exploratory Factor Analysis Results.....	61
Table 5. Wording of Issues Tested for Experiment Two.....	85
Table 6. Experiment Two, Pilot One: Attitude Strength Scores.....	87
Table 7. Reliability of Attitude Strength Indicators by Issue.....	89
Table 8. Distribution of Issue Attitudes by Political Party Identification.....	89
Table 9. Experiment Two, Stimuli Pilot One Results.....	95
Table 10. Experiment Two, Stimuli Pilots 1-3: Comprehension Comparison.....	99
Table 11. Experiment Two: Attitude Strength Reliability Pre/Post Test.....	103
Table 12. Directionally Motivated Reasoning Differences Between Affirmatory and Non-Affirmatory Conditions by Issue Type.....	112
Table 13. Behavioral Differences Between By Issue Type.....	117

List of Figures

Figure 1. Interaction of Issue Type and Message Type on Goodwill.....	114
Figure 2. Interaction of Issue Type and Message Type on Character.....	115
Figure 3. Interaction of Issue Type and Message Type on Source Credibility.....	116

Chapter 1: Literature Review

Voting is important to the health of democracy. It is the main mechanism by which voters express their preferences and the main vehicle by which the electorate has the ability to check politicians. To the extent that voters are able to make “correct” voting decisions (e.g., choosing politicians who mostly share their attitudes and beliefs), the make-up of the government should accurately reflect the opinion of the people. However, there is reason to believe that this ideal is not always attained. Recent research in political psychology suggests that voters do not always choose politicians that accurately represent their attitudes and beliefs (Lau & Redlawsk, 1997). Instead, they rely on previously-held identities and beliefs, such as party identification, to inform voting decisions.

This phenomenon is more commonly referred to as directionally motivated reasoning. More formally, directionally motivated reasoning is the motivated desire to process incoming information in a way that is compatible with previous held beliefs (Kunda, 1990). In short, motivated reasoning is the desire to believe what one already believes, regardless of information to the contrary.

In fact, information to the contrary is rarely effective in overcoming directionally motivated reasoning effects. When presented with information that disagrees with prior beliefs, individuals are more likely to argue against the information (Phillips, Urbany, & Reynolds, 2008), question the credibility of the source of that information (Stroud & Lee, 2013), and interpret ambiguous information in a way that still agrees with their prior beliefs (LaMarre, Landreville, & Beam, 2009). Additionally, given the opportunity, voters are unlikely to choose to consume information that disagrees with what they

already believe (Iyengar & Hahn, 2008; Garrett, 2009) or expose themselves on social media to the views of those with whom they expect to disagree (Colleoni, Rozza, & Arvidsson, 2014). To the extent that counter-attitudinal information is sought, it is usually used for the purposes of discounting (Redlawsk, 2002).

Furthermore, motivated reasoning also influences the way in which individuals process political advertising messages. Political advertising is a key way that campaigns communicate with voters (Ridout & Franz, 2011), yet political advertising effects are subject to the same motivated reasoning effects as other political stimuli. Though political advertising has been branded as the last direct effects medium (Kaid, 2002), recent research in this area demonstrates that this is far from true. There is a mounting body of evidence that personal characteristics of voters interact with reception of political advertising. Richey (2012) found that authoritarian voters were much more responsive than the average voter to political advertisements using fear appeals. Sullivan, Stevens, Allen, and Alger (2008) found that when presented with a political advertisement sponsored by a non-favored politician, voters were more likely to perceive the information conveyed in the advertisement as untrue, resulting in greater scrutiny of the arguments presented in the advertisement. However, advertisements from a favored candidate were not scrutinized as carefully. Additionally, political advertisements from a favored candidate are particularly motivating (Brader, 2006), while political advertisements from a disfavored candidate have very little effect on voters (Matthes & Marquart, 2015).

Beyond creating adverse reactions to political advertising, this type of reasoning can lead to problematic voting down the road that presents both a current challenge and future opportunity for political campaigns. The challenge for campaigns is how to communicate information that differentiates them from their opponent in a way that doesn't alienate out-party voters. To the extent that the success or failure of a candidate relies on their ability to effectively communicate with voters, directionally motivated reasoning can lead voters to ignore or discount information that may well be relevant to their policy interests. Scholars estimate that between 15 and 25 percent of voters vote "incorrectly" or against their stated policy preferences (Lau & Redlawsk, 1997; Ryan, 2011; Lau, Andersen, & Redlawsk, 2008). This presents a clear opportunity for campaigns. Voters who are voting "incorrectly" or against their policy preferences are prime candidates to be swayed to the opposition. Generally, these cross-pressured voters (voters who hold beliefs that do not align solely with one party) are considered to be "persuadable" (Hillygus & Shields, 2008). However, to the extent that directionally motivated reasoning is preventing the assimilation of new information, voters may be missing information presented in political advertising that could persuade them to examine an out-party candidate. This is problematic for campaigns, as the ability to reach out-party voters can be critical to the success or failure of a political candidate, especially in races where a winner is often determined by less than a five percent margin (consider the 2012 presidential election, where Barack Obama received 51.1% of the vote while Mitt Romney received 47.2% of the vote).

Additionally, the issue of directionally motivated responses to political advertising is problematic from a theoretical perspective. Historically, few political advertising studies have taken into account the dynamic influence of political party affiliation on the reception of information from political advertising (notable exceptions include Stevens et al., 2008, Matthes & Marquart, 2015; Richey, 2012). However, a dominant stream of research in political advertising actively discounts and excludes the role that party affiliation plays (e.g. Pinkleton, 1997, Fernandes, 2013). This is troubling and calls into question the generalizability of many political advertising studies (especially those dealing with negative political advertising). As such, examining the effect of motivated reasoning in political advertising helps to advance thinking about the personal characteristics of voters and to highlight the importance of including voter characteristics when thinking about how voters respond to political advertising.

In short, directionally motivated reasoning presents a problem in the assimilation of new political information in some non-trivial segment of the voting population. Directionally motivated reasoning is a problem for campaigns because it prevents persuadable voters from fully considering an out-party candidate. However, given the somewhat limited body of research that examines the interplay between voter characteristics and political advertising reception, a messaging strategy that attempts to mitigate directionally motivated reasoning for campaigns is not explicated. Yet clearly, finding such a strategy would help political campaigns use political advertising to target potentially persuadable voters. Even within the field of motivated reasoning more generally, there is little that directly addresses strategies for overcoming it. The existence

of directionally motivated reasoning in politics has been well-documented, affecting everything from candidate preference (Lodge & Taber, 2013) to assimilation of new political information (Taber, Cann, & Kucsova, 2009) to vote choice (Weeks & Garrett, 2014). However, less work has examined strategies for overcoming motivated reasoning.

The small body of work that does examine strategies for overcoming motivated reasoning looks at one specific mechanism: accuracy-based reasoning. Accuracy-driven motivated reasoning occurs when individuals are motivated to make a correct decision (Kunda, 1990). Scholars have been able to successfully induce individuals to reason in an accuracy-based, rather than directionally-based fashion (e.g., Tetlock & Kim, 1987; Bolsen, Druckman, & Cook, 2014) but these studies have relied heavily on experimental scenarios where individuals believed they would have to strongly defend their positions to others. This type of accountability rarely exists in the natural political environment. It seems unlikely that a call to accuracy-based thinking by an out-party candidate would be warmly received by out-party voters. Therefore, other strategies must be considered.

The main argument of this dissertation is that in order to find a strategy for overcoming directionally motivated reasoning, it is important to understand the psychological impetus that drives voters to engage in directionally motivated reasoning in the first place. Once a psychological understanding of the mechanism exists, that understanding may be used to inhibit the likelihood that voters will engage in directionally motivated reasoning in the face of conflicting political information. Though there are likely to be many possible strategies by which the psychological underpinnings,

strategies that are specifically actionable within a political advertising context will be investigated.

As such, the work presented in this dissertation will demonstrate the current preponderance of directionally motivated reasoning (especially within the political advertising field), examine and identify a potential psychological mechanism, and use that mechanism to create and test a political advertising message strategy aimed at reducing directionally motivated reasoning.

Motivated Reasoning

Though not officially dubbed directionally motivated reasoning until 1990 (c.f., Kunda, 1990), the idea that individuals prefer to keep beliefs consistent with their own emerged much earlier. Festinger (1962) outlined the theory of cognitive dissonance, demonstrating that individuals felt anxiety and negative arousal when forced to engage in behaviors that were against their stated attitudes and were more likely to change their attitudes as a way to maintain internal consistency. These findings provided an early basis for the ideas behind motivated reasoning. Shortly thereafter, Lord, Ross, and Lepper (1979) demonstrated that not only do individuals want to maintain beliefs they already hold, but they actively engage in cognitively biased actions in order to do so. Far from rationally considering all viewpoints and arguments about a subject, Lord et al. (1979) showed instead that in the face of belief-challenging information, individuals became defensive and attempted to discredit either the source of the information or the information itself as a way of safe-guarding their previously held beliefs.

Since that time, the preponderance of directionally motivated reasoning has not abated. Currently, its influence can be found in all parts of the political process.

Directionally motivated reasoning has been shown to influence a wide range of political variables including political news choice (Iyengar & Han, 2008), political information search (Redlawsk, 2002), attitudes toward politicians (Lodge & Taber, 2013), perceptions of ambiguous political information (LaMarre et al., 2009), policy support (Slothuus & de Vreese, 2010) and vote choice (Weeks & Garrett, 2014)¹.

In fact, directionally motivated reasoning has become so prevalent in the political realm that Taber and Lodge (2012) went so far as to state that “defense of one’s prior attitude is the general default when reasoning about attitudinally contrary arguments” (p. 249). Across all of these political domains, directionally motivated processing leads to a host of potentially undesirable consequences including counter-arguing, source derogation, attitude polarization, outgroup derogation, and biased policy support/voting. Each of these outcomes will be discussed in turn.

The Consequences of Directionally Motivated Reasoning

Directionally motivated reasoning affects the way in which beliefs are updated based on new information. Individuals who engage in directionally motivated processing are more likely to engage in a disconfirmation bias, which is the likelihood that belief-challenging information will be subjected to intense argumentation and scrutiny (Lodge

¹ It is not the intent of this dissertation to provide a complete background on the existence of motivated reasoning, but rather to discuss the normatively problematic outcomes that stem from motivated reasoning. However, it is important to note that the existence of motivated reasoning has been documented across all cognitive, attitudinal and behavioral aspects of politics.

& Taber, 2013). Individuals engaging in a disconfirmation bias are more likely to counter-argue with information that is incongruent with their prior beliefs (Taber et al., 2009) as well as derogate the source of counter-attitudinal information (Smalley & Stake; 1996).

When counter-arguing, individuals formulate cognitive responses that either support their original position on an issue or contradict counter-attitudinal information (Petty & Cacioppo, 1979). These cognitive responses are more likely to occur when individuals are presented with information that disagrees with their prior beliefs than when presented with belief-consistent information (Petty & Cacioppo, 1979). Additionally, these responses are more likely to occur when individuals possess high issue importance, such as when an attitude or belief is considered very important to the individual (Petty & Cacioppo, 1979). Edwards and Smith (1996) found that arguments that disagreed with prior beliefs were scrutinized longer, judged to be weaker than pro-belief arguments, and were subjected to more extensive refutational arguments. Taber and Lodge (2006) support these findings in a political context, showing that individuals with strong priors generated almost twice as many arguments countering belief-inconsistent information as they did arguments supporting belief-consistent information.

Additionally, individuals appear highly motivated to counter-argue. When faced with counter-attitudinal information, individuals were more likely to seek out further counter-attitudinal information (Meffert et al., 2006) and spend more time and effort reading and processing counter-attitudinal information (Redlawsk, 2002). However, neither more information nor time spent with belief-challenging information led to

greater acceptance of belief-challenging arguments. Instead, voters reported *more* positive attitudes toward their preferred candidates (Meffert et al., 2006; Redlawsk, 2002). The conclusion of the authors was that individuals chose to spend their time counter-arguing information about their non-preferred candidate and thus bolstering their previous existing beliefs. This is clear evidence of a disconfirmation bias, as participants spent more time and effort discrediting counter-attitudinal information than they did critically examining pro-attitudinal information. Additionally, this effect persisted regardless of the length or strength of the arguments presented (Taber et al., 2009).

Within the political advertising field, a growing body of evidence suggests that counter-arguing is a common occurrence in response to out-party political advertisements as well. Daignault, Soroka, and Giasson (2013) found that voters exposed to negative political advertisements attacking their preferred candidate generated an average of 4 counter-arguments against the information, as opposed to an average of 1.5 counter-arguments against a positive advertisement for their candidate. Phillips, Urbany, and Reynolds (2008) found similar results, showing that voters who were exposed to political advertisements sponsored by a favored politician produced significantly more support arguments in favor of their candidate and significantly fewer counter-arguments than those who were exposed to a political advertisement sponsored by a non-favored politician. As such, it appears that directionally motivated reasoning may lead voters to counter-argue with information presented in political advertising.

Related to counter-arguing, directionally motivated reasoning also alters the *perception* of information received from political advertisements. Stevens et al. (2008)

found that voters were more likely to respond negatively to an out-party advertisement when attacks against their preferred candidate were perceived to be unfair (c.f. Kenney & Kahn, 1999; Fridkin & Kenney, 2011). However, Stevens et al. (2008) further discovered that voters perceived almost all attacks against their favored candidate to be unfair, suggesting that negative political advertising can have a “backlash effect” where individuals actually lower their evaluations of the sponsor of the advertisement, rather than the target of the advertisement. Examples of this effect are well-documented in the negative political advertising literature. Jasperson and Fan (2002) demonstrated this boomerang effect during a real congressional election in Minnesota, demonstrating that candidate favorability was negatively impacted by negative campaigning done on behalf of the candidate (see also Carraro, Gawronski & Castelli, 2010). Fernandes (2013) found similar results, showing that after repeated exposures to the same negative political ad, voters reported lower evaluations of the sponsoring candidate. Furthermore, this perceptual distortion of political information occurs no matter what type of information is presented. Druckman and Bolsen (2011) found that factual information played little role in helping change people’s opinions about emergent technologies, once they had already formed an initial opinion. Nyhan et al. (2014) found similar results, showing that no arguments about the benefits of vaccinating were able to increase parental intent to vaccinate among anti-vaccine parents.

One common way that individuals are able to counter-argue against counter-attitudinal information is through derogating the source of that information (Lord et al., 1979). Smalley and Stake (1996) found that when hostile or negative individuals were

presented with negative feedback, they were able to mitigate the effect of the negative feedback by derogating the source of the feedback. Heath and Douglas (1991) found similar results, showing that individuals who were highly involved with an issue were more likely to denigrate sources who presented ideas that were counter to their own. The same types of credibility issues are present in voter responses to political advertising as well. Meirick (2002) found that voters exposed to a negative advertisement attacking a favored candidate were significantly more likely to denigrate the credibility of the source of the advertisement compared to voters exposed to a comparative advertisement sponsored by a non-preferred candidate (although voters in both conditions engaged in source derogation). Garramone and Smith (1984) found similar results, showing that the more a voter identified with the party of an attacking candidate (i.e. the sponsor), the more trustworthy they found negative political advertisements produced by that candidate. Though source credibility has not been well-studied as a dependent outcome of political advertising exposure, there is some evidence to suggest that directionally motivated reasoning affects credibility evaluations of politicians. This is important, as source credibility influences both perceptions of information credibility as well as participation intention (Housholder & LaMarre, 2014).

Another consequence of directionally motivated reasoning is attitude polarization. Lord et al. (1979) provided the first evidence of this effect in their study on the death penalty. They found that participants exposed to both pro and con articles on the death penalty actually had more extreme attitudes toward their favored position on the death penalty following exposure, despite the evidence provided against their favored position.

They concluded that people's prior attitudes and beliefs motivated this attitude polarization. More recent research appears to confirm this finding. Voters routinely report stronger, more polarized attitudes following exposure to counter-attitudinal information (Lodge & Taber, 2013). In fact, Redlawsk (2002) found that though voters in his experiment spent more time reading and interacting with counter-attitudinal information, their attitudes toward their preferred candidate were more favorable than at the outset. He theorized that people spent more time with counter-attitudinal information for the purpose of discounting and that the act of discounting actually made attitudes stronger. This effect is especially pronounced among strong partisans (Hart & Nisbet, 2011). This type of attitude polarization can be found in political advertising research as well. Garramone, Atkin, Pinkleton, and Cole (1990) found that exposure to negative political advertising led to attitude polarization, with both supporters of the sponsor and supporters of the target reporting greater distance between their evaluations of their favored candidate and their non-favored candidate. Ansolabehere and Iyengar (1995) demonstrated similar results, arguing that exposure to political advertising shrinks the overall electorate and those who do turn out to vote tend to be very polarized in their political attitudes (although see Goldstein & Freedman, 2002 for a rebuttal to the idea that political advertising exposure shrinks the overall electorate).

It is worth mentioning at this point that there is a fairly substantial body of work in political advertising research that finds exactly the opposite of the above-stated thesis, namely that negative political advertising works as intended, by lowering attitudes toward the target of the advertisement and raising attitudes toward the sponsor of the

advertisement (thus shrinking the attitudinal distance between the two and reducing attitude polarization). Past work has found that exposure to negative political advertising leads to lower overall evaluations of the targeted candidate (e.g. Pinkleton, 1997; Kaid & Boydston, 1987; Fernandes, 2013). However, these studies all report making a significant effort to a) hide or exclude any information within the advertisement that might prime party identification and b) show the advertisements to voters who are either not in a position to vote for that candidate or have not been exposed to the candidate before. This is problematic, as it completely discounts the role that prior knowledge, attitudes and beliefs have on reception of political advertising messages. Fernandes (2013) states explicitly that “using candidates that are unknown to participants helps to eliminate the influence of previous beliefs about political parties and candidates’ image, a common practice utilized in political advertising research” (p. 279; see also Kaid, Chanslor, & Hovind, 1992). As such, the body of work that does find less attitude polarization as a result of exposure to negative political advertising appears to specifically remove the presence of factors that might lead to directionally motivated reasoning. If anything, these studies indirectly support the contention that directionally motivated responses to political advertising messages impact attitudinal outcomes.

Directionally motivated reasoning also leads to outgroup derogation. Not only do voters report stronger positive attitudes toward their preferred candidates, but they also actively denigrate members of the outgroup. Outgroup derogation is the act of actively perceiving members of an outgroup to be more negative than members of one’s own group (Brewer, 1979). Outgroup derogation can take the form of negative trait attribution

but can also manifest behaviorally as discrimination against the perceived outgroup (Tajfel & Turner, 1986). This is different than in-group favoritism. In-group favoritism involves actively trying to collect resources and power for one's own group, while outgroup derogation involves actively trying to lower attitudes toward and perceptions of a relevant outgroup. Directionally motivated reasoning has been previously linked specifically to outgroup derogation. Fein and Spencer (1997) demonstrated that participants exposed to negative information about their performance on an intelligence test (i.e. a counter-attitudinal position) were more likely to negatively evaluate (i.e. derogate) a job candidate if the candidate appeared to be of a different sexuality than the participant (i.e. a member of an outgroup). Politically, voters are more likely over-estimate the extremism of out-party voters (Graham, Nosek, & Haidt, 2012) and to derogate a wide range of potential "outgroups" (van Prooijen, Krouwel, Boiten, & Eendebak, 2015). Schemer (2011) demonstrated this effect from political advertising messages, showing that individuals who were shown political advertisements about disfavored out-groups (i.e. immigrants) were subsequently more negative toward immigrants. Additionally, this negativity caused individuals to pay greater attention to subsequent advertising, which in turn reinforced the negative evaluations of the disfavored outgroup.

Finally, directionally motivated reasoning also has effects on behavior, including vote choice, turnout and support for public policy. Weeks and Garrett (2014) found that motivated belief in rumors about political candidates uniquely contributed to vote choice. That is, individuals who were directionally motivated to believe more rumors about a

candidate were ultimately less likely to vote for that candidate. From an aggregate perspective, Lebo and Cassino (2007) found that partisans were more likely to punish and reward presidents based on economic performance, but only when the president was of the opposite political party. Lebo and Cassino (2007) conclude that partisans remained wholly unresponsive to performance indicators when the president shared their political party. This suggests that vote choice is relatively unaffected by negative information about one's preferred candidate, a clear indication that directionally motivated reasoning has an effect on voting behavior. Matthes and Marquart (2015) confirm this finding, showing that negative political advertising served as a non-significant cross-pressure on out-party partisans. Voters in their study who were exposed to advertisements from a non-preferred candidate reported no difference in likelihood of voting for their preferred candidate.

Directionally motivated reasoning in the face of political advertising may also affect voter mobilization overall. Matthes and Marquart (2015) found that voters exposed to positive information about a preferred candidate were more likely to intend to vote for that candidate. Brader (2006) found similar results, showing that campaign ads appealing to enthusiasm were much more likely to mobilize in-party voters. However, other political advertising work has found negative political advertising to have a mobilizing effects on voters as well (Goldsten & Freedman, 2002; Wattenberg & Brians, 1999, though see also Ansolabehere et al., 1994, which actually shows a negative relationship between negative political advertising and voter turnout). Overall, the effects of directionally motivated reasoning on turnout are perhaps less clear. Directionally

motivated reasoning also affects policy support among partisans. Voters favor policies supported by politicians who share their political party and oppose policies supported by politicians who do not share their political party (Slothus & DeVreese, 2010; Bolsen, Druckman, & Cook, 2014). Lenz (2012), found that rather than picking a presidential candidate based on previously held policy beliefs, voters instead shift their policy beliefs to be in line with a favored candidate. This suggests that individuals are motivated to believe that their candidate preferences are correct.

Looking at this body of work as a whole, it would appear that directionally-motivated reasoning leads to partisan voters whose attitudes are determined by party elites and are staunchly resistant to new, counter-attitudinal information; so much so that counter-attitudinal information presented via political advertising often has a boomerang effect, leaving voters more staunchly convinced of their prior attitudes and beliefs. Yet, as discussed previously, this creates problems for both campaigns and voters. From the voter end, directionally motivated reasoning does not always lead citizens to make ostensibly “correct” voting decisions (Ryan, 2011). Instead, citizens vote based solely on their prior attitudes or beliefs about a party/candidate which can lead to support for candidates that do not represent their stated policy preferences or their best interests (Lau & Redlawsk, 1997).

From a campaign perspective, campaigns are missing an opportunity to potentially get more mileage out of their political advertising campaigns. It is essential for candidates to be able to point out weaknesses in their opponent’s qualifications and policy positions. Yet to the extent that voters engage in directionally motivated reasoning

in the face of political advertisements that point out these weaknesses and problems, this task becomes nearly impossible. As such, understanding strategies for overcoming directionally motivated reasoning have important implications for both voters and campaign strategists. Gaining a more receptive, less defensive audience for one's political advertisements could tip the balance for a candidate, especially when many elections are determined by only a small percentage of the vote. The next section details two specific strategies for overcoming motivated reasoning: inducing accuracy goals and changing the information environment.

Overcoming Motivated Reasoning

Some work has shown that voters can be induced into thinking more even-handedly (i.e. engaging in less directionally motivated reasoning) by making accuracy-based judgments more salient. When people are motivated by accuracy, they are driven by the need to make a correct decision. When driven by accuracy goals, individuals "expend more cognitive effort..., attend to relevant information more carefully, and process it more deeply" (Kunda, 1990, p. 483). Tetlock and Kim (1987) were able to induce subjects to more accuracy-based thinking when subjects knew they would have to justify their decisions before they made them. Individuals induced to accuracy were more likely to engage in complex and elaborate reasoning and were able to produce more accurate behavioral predictions. Freund, Kruglanski, and Shpitzajen (1985) found similar results, showing that individuals with a high fear of invalidity were more likely to spend time examining information that was inconsistent with their previous beliefs on a subject and were less likely to rely on heuristic rules for decision-making.

In a political context, Bolsen, Druckman and Cook (2014) found that telling participants they would later have to justify their judgements led them to make reasoning decisions about proposed energy policies that were not biased by partisan slant. In short, individuals are capable of engaging in more even-handed decision-making, but they must be induced to do so. However, this is hardly an accurate characterization of the current political environment. Voters are rarely called upon to think even-handedly about candidates. Additionally, the average perceived heterogeneity of most people's political networks is quite low- around the nature of .25 on a zero to one scale, where zero indicates absolute agreement with the political network (Levitan & Wronski, 2014). In fact, Levitan and Wronski (2014) said that approximately 20% of their sample never discussed politics with anyone who disagreed with them. As such, it seems unlikely that the average voter is regularly called upon to defend his or her position on political issues. Any inducements for voters to engage in accuracy-directed reasoning are absent from the usual political campaign. Additionally, it is unrealistic to think that calls to accuracy-minded thinking from a non-preferred candidate would lead to a positive outcome among voters. As such, there is little likelihood that voters will be called to engage in accuracy-based thinking.

Another potential mechanism for overcoming motivated reasoning is changing the information environment of the individual. A recent article by Redlawsk, Civettini and Emmerson (2010) suggests that even the most hardcore motivated reasoners eventually "get it" when faced with large amounts of attitude-incongruent information and little attitude-congruent information (think an 80-20 split). Yet the scenario they outline is

hardly realistic in a traditional campaign setting, for two reasons. First, the parties are sorted ideologically on many issues and it is rare to see politicians (especially in national-level campaigns) who deviate significantly from the party line. Therefore, it is unlikely that individuals will be exposed to politicians from a favored political party with whom they disagree 40 or 80 percent of the time.

Second, even if we take a looser interpretation of Redlawsk et al.'s (2010) findings and assume that an information environment made up of at least 50 percent attitude-incongruent information (not just politician positions) would have a similar effect, this characterization of the political information environment is hardly realistic. The advent of new technology and ideologically-aligned cable news stations has ensured that voters are never in any position to subject themselves to an information environment that composes at least half attitude-incongruent information. Additionally, voters are quite adept at choosing to place themselves in information environments that never result in exposure to counter-attitudinal information. The selective exposure hypothesis suggests that individuals tend to expose themselves to attitude-reinforcing information and avoid attitude-challenging information (Stroud, 2008). In the political realm, this is largely the case. Stroud (2008) found that during the 2004 election, Republicans tended to favor conservative media outlets while Democrats favored liberal media outlets. Additionally, while voters do not actively avoid counter-attitudinal information (Knobloch-Westerwick & Meng, 2009), they do not actively seek it out either (Garrett, 2009). As such, partisan voters, over the course of an election, are not likely to encounter counter-attitudinal information from political news sources. This makes it unlikely that

voters will ever be exposed to an information environment where they are exposed to mostly attitude-challenging information. This is especially true in a political advertising environment, where voters are routinely exposed to advertisements sponsored by both in-party and out-party candidates within the same commercial block. In 2012, both candidates spent roughly equal amounts of money on campaign advertising (Washington Post), suggesting that voters were likely exposed to roughly similar amounts of advertising from both candidates. Even if voters found themselves in a more targeted environment, it is more likely that they received an overabundance of advertising from their preferred candidate than their non-preferred candidate. As such, the information environment necessary to sway motivated reasoners is just not present in either the political information field or political advertising.

Additionally, more information is not always sufficient to lead to attitude change. For an extreme example of this idea, consider an issue on which there is near universal scientific agreement (vaccines). Despite overwhelming scientific evidence that vaccines do not cause autism, non-trivial percentages of the population still believe exactly the opposite. Twenty-five percent of Americans believe that vaccines cause autism (Freed et al., 2010). Indeed, a recent study by Nyhan et al. (2014) tested four different communication strategies to overcome vaccine resistance, including scientific information, graphic pictures of children who had contracted dangerous diseases and a story about an unvaccinated child who almost died of measles. None of these communications were effective in increasing intention among vaccine-resistant parents to vaccinate their children. Clearly, the presence of more information is not enough to

reduce directionally motivated reasoning. As such, it is unlikely that large ad buys by candidates, directed at out-party voters, would be enough to sway voters. Therefore, the solution to overcoming motivated reasoning is not to simply provide more and more information to out-party voters. In order for information to have an effect, voters must be receptive to that information. However, the work reviewed above clearly suggests that voters, in general, are far from receptive to information that contradicts what they currently believe.

A Psychological Basis for Motivated Reasoning

However, there are other possibilities for overcoming directionally motivated political reasoning that as of yet, remain largely untested. Work from social psychology has taken a different approach- treating the underlying cause of the directionally motivated reasoning. Though Taber and Lodge (2006) suggest that directionally motivated reasoning is simply the default for voters, most of the experimental work in this area suggests that directionally motivated reasoning occurs most often when voters are presented with information that directly counters their prior attitudes and beliefs. This suggests that something psychological occurs in voters when they are exposed to counter-attitudinal information that results in directionally motivated processing.² It is possible that mitigating this psychological response may prevent the occurrence of directionally motivated reasoning, thus mitigating its cognitive, affective and behavioral consequences.

² It is important to stress that directionally motivated processing also occurs in the face of pro-attitudinal information. However, the thrust of this dissertation is examining the situation of negative political advertising (i.e. exposure to counter-attitudinal information). As such, the mechanism of motivated reasoning is explored in relation to exposure to counter-attitudinal information.

Thus, the question remains: what happens when individuals are confronted with counter-attitudinal information that leads to directionally motivated reasoning? That is, when a voter is exposed to a political advertisement by a non-preferred candidate, what cognitive, affective and physiological reactions occur that lead an individual to engage in motivated reasoning? What *causes* voters to react this way to a negative political advertisement that attacks their favored candidate?

A recent article by Peterson, Skov, Serritzlew, and Ramsøy (2013) outlined two potential psychological mechanisms which may cause motivated reasoning. The first potential mechanism they put forth is that voters engage in motivated reasoning because it is easier. That is, voters choose to process information through the lens of existing attitudes and beliefs because it requires less cognitive effort. In this scenario, motivated reasoning is simply the by-product of cognitive laziness on the part of voters. It takes time and effort to process new information and the act of thinking about information presented in a negative political advertisement is just too cognitively taxing for the average voter. As such, voters choose to use motivated reasoning because it is easier. However, this does not fit with the counter-arguing findings of negative political advertising. Voters did not discount information for the purpose of spending less time and cognitive resources. In fact, generally, the opposite seems to occur, with voters spending more time and effort discounting information that disagrees with their prior beliefs (Redlawsk, 2002; Meffert et al., 2006). As such, it seems unlikely that motivated reasoning is caused by cognitive laziness on the part of voters (a conclusion reached Peterson et al. (2013) as well).

The second potential mechanism the authors put forth is that motivated reasoning occurs because individuals feel the need to defend their group identity (which they conclude is what drives motivated reasoning in voters). The idea that group identity underlies directionally motivated reasoning is not a particularly new one. However, the Peterson et al. (2013) article leaves some evidence to be desired. The article provides clear evidence against the heuristics hypothesis. However, the evidence for group identity is less clear. The authors find that voters spend the longest amount of time processing information when they are confronted with non-preferred policy positions taken by a preferred party (an example of this would be a Democratic candidate that supports strongly pro-life policies). They use these findings to argue that group identity, rather than heuristics, is what leads to motivated reasoning. But their evidence fails to offer a clear explanation as to *why* group identification leads to motivated reasoning. However, understanding why group identification matters is central to the premise of this dissertation, namely that motivated reasoning can be overcome. If group identity is the underlying mechanism, understanding why group identification leads to directionally motivated reasoning will lead to specific strategies that can be used to interrupt this process and reduce directionally motivated reasoning.

Fortunately, though the Peterson et al. (2013) article does not directly address *why* group identification matters, other scholars have examined this phenomenon in the political sphere. A handful of researchers in political science have suggested that the answer to why group identification matters lies in a more affective understanding of party (group) identification. Green, Palmquist and Shickler (2002) argue that party

identification, for some voters, represents a psychologically important attachment. When the party is threatened, one's sense of self within the party context is threatened. Though Green et al. (2002) do not directly refer to this concept as self-esteem, it is clear that talking about one's sense of self is referring to the self-esteem of the individual as part of the group (in this case, political party). Put differently, when the group is threatened, the self-esteem of the individual group member is threatened (Rubin & Hewstone, 1998). As such, self-esteem may be able to more adequately explain *why* group identification leads to a greater engagement in directionally motivated reasoning. The case for self-esteem is outlined below.

Self-Esteem

Self-esteem is the “overall evaluation of one's own worth, value or importance” (Blascovich & Tomaka, 1991, p. 115). That is, self-esteem is the global evaluations that people have of themselves across a variety of self-relevant traits. Self-esteem is considered to span many self-domains and is considered to be larger than the evaluation of a specific self-relevant attribute (e.g. appearance). Self-esteem is considered to be both a trait and a state. Most people have a fairly consistent self-esteem baseline (i.e. trait self-esteem). However, situational occurrences can shift the self-esteem of the individual positively or negatively away from the overall baseline (i.e. state self-esteem). Additionally, self-esteem has long been considered a powerful motivator of individual behavior. Cohen (1959) found that individuals with high self-esteem were more likely to try and influence others and more likely to report having been influential on others. Furthermore, those with high self-esteem were more likely to engage in ego-defensive

behaviors when confronted with an unfavorable evaluation such as denying, repressing or ignoring challenging information. Positive self-esteem (i.e. high self-esteem) is associated with a range of positive outcomes including reduced depression (Tennen & Affleck, 1993), greater persistence at difficult tasks (Shrauger & Rosenberg, 1970; Felson, 1984) and increased happiness (Freedman, 1978).

However, individual self-esteem is not the only type of self-esteem that exists. More recently, researchers have found evidence to suggest that individuals possess “collective self-esteem”, or self-esteem that is tied to the welfare of relevant in-groups. Individuals internalize the relevant traits that they share with a preferred in-group, taking on those traits as a part of their own self-concept (Smith & Henry, 1996). Additionally, individuals high in collective self-esteem are more likely to engage in outgroup derogation when the performance of the group is called into question (Crocker & Luhtanen, 1990). This derogation helps the individual to recover their self-esteem equilibrium (Lemyre & Smith, 1985). Overall, it appears likely that self-esteem can be affected by threats to group memberships. More specifically, Rubin and Hewstone (1998) found the most support for engaging in outgroup discrimination behaviors when specific, social state self-esteem was threatened. Specific self-esteem refers to a particular self-image and the esteem with which one holds that particular self-image (Rubin & Hewstone, 1998; Rosenberg et al., 1995). State self-esteem refers to self-evaluations that are carried out in the present and evaluate the self-esteem of an individual at any given point in time, as opposed to over time (Kline, 1993). Social self-esteem is the esteem in which individuals hold important group memberships (Rubin & Hewstone, 1998). As

such, specific, social state self-esteem refers to in-the-moment feelings about a group membership that one considers to be important (as opposed to long-term feelings about a group association)³.

In the political realm, group membership is inherent in the political process in the form of political parties. Some political scientists have argued that rather than simply providing political cues to individuals, partisanship instead “reflects a distinct group attachment that is psychologically important to many citizens” (Peterson et al., 2013, p. 835). Social identification with one’s preferred political party predicted stronger partisan self-placement as well as greater perceptions of distance between members of the same party and members of the opposing party (Greene, 1999; Green et al., 2002).

Physiologically, there is support for this idea as well. Stanton et al. (2009) found that partisans’ testosterone levels dropped when their favored party suffered a defeat, which is similar to what happens when individuals suffer a personal setback. Lodge and Taber (2013) use response times to show that not only are partisan identifications easily activated, even by subliminal stimuli, but that these identifications exert subconscious influence on voter attitudes toward both candidates and issues.

Therefore, there seems little reason to believe that the group attachments to parties function significantly differently than group attachments to other, non-political

³ The key difference here is that social **trait** self-esteem refers to a voter’s feelings about his or her group membership overall, across time (i.e. how do I generally feel about belonging to the Democratic party). Social **state** self-esteem, by contrast, refers to a voter’s feelings about his or her group membership at a specific point in time (i.e. how do I feel about belonging to the Democratic party right now after I have seen a political advertisement attacking the Democratic candidate). The latter makes more sense in the context of understanding responses to political advertisements, which are simply moments in time.

groups. Merging these two group identification literatures, it seems highly plausible that partisans' self-esteem is, to some extent, tied to the successes and failures of their preferred political party. As such, directionally motivated reasoning may serve as a method for bolstering the self-esteem of the individual in relationship to the group. A more concrete example would be as follows. A Democratic voter is exposed to a political advertisement sponsored by a Republican that is attacking the Democratic candidate. The voter feels that a part of her self-concept, i.e. her political party attachment, is under attack and that there is something negative about her preferred candidate. This creates a temporary drop in the self-esteem of the voter, which she wants to mitigate, as the psychological drop in self-esteem is uncomfortable and anxiety-producing. Therefore, the voter engages in a variety of motivated reasoning strategies (such as arguing against the information or derogating the source) to convince herself that there is nothing to fear in her judgement or the performance of the party, thus raising her state self-esteem back to previous levels. Clearly, in this example, the critical moment and impetus for engaging in motivated reasoning in the face of political advertising is the mental discomfort caused by the self-esteem hit. Thus, to the extent that directionally motivated reasoning represents a mechanism by which the self-esteem of the individual is repaired, overcoming that directionally motivated response would require bolstering or preservation of the individual's self-esteem. Put differently, if an individual's self-esteem does not drop, the impetus for engaging in motivated reasoning does not exist, thus reducing the likelihood that directionally motivated reasoning outcomes will occur. Current negative political advertising strategies are aimed solely at getting voters to

question their own judgment and party membership, which leads to the problematic self-esteem hit and subsequent psychological conflict. Therefore, political advertising aimed at overcoming directionally motivated reasoning responses should use strategies that can bolster, rather than diminish the self-esteem of a voter.

There are several ways by which individual self-esteem can be bolstered. One strategy involves the use of over-optimism. Overly optimistic individuals over-estimate their positive qualities and underestimate their negative qualities (Taylor & Crocker, 1981). Additionally, overly optimistic individuals believe that they will experience more positive than negative events in the future (Weinstein, 1980). In short, over optimism gives individuals an inflated sense of their own skills and abilities. In the case of political party identification, voters may be unrealistically positive about their own party's past performance on important issues or be overly optimistic about a favored candidate's ability to perform in office. However over-optimism as a method for overcoming directionally motivated reasoning is problematic as it is really just another method for engaging in motivated reasoning. Over-optimism means that in the face of negative information about the group performance, individuals either discount the negative information as unimportant (Dunning, Leuenberger, & Sherman, 1995) or steadfastly believe that the group will perform much better in the future (Weinstein, 1980). In a political advertising context, over-optimism is a strategy that can be used to discount real, factual information about weaknesses that a preferred candidate possesses. By over-estimating the abilities of a preferred candidate, voters are able to successfully rebut any information to the contrary. Discounting of information is itself an outcome of

directionally motivated reasoning. Thus, over-optimism, by essentially being a method through which individuals can engage in directionally motivated reasoning, is not a viable strategy for *reducing* directionally motivated reasoning.

A second way that individual self-esteem can be bolstered is through in-group bias and outgroup derogation. Individuals who need to bolster their self-esteem will often engage in behaviors that are likely to benefit the key in-groups with which they identify. This is often paired with outgroup derogation, through stereotypes or other forms of prejudice (Abrams & Hogg, 1988). In a political context, outgroup derogation is common. American politics is full of stereotypes used by one party to demonize members of another party, such as “welfare queen” or “old white guy.” These stereotypes are meant to suggest something about a relevant, disfavored outgroup. Engaging in these types of stereotyped judgements allow individuals to feel superior to the members of the disfavored outgroup (Wills, 1981). However, similar to over-optimism, outgroup derogation is an activity of the directionally motivated reasoner. In fact, outgroup derogation has already been previously highlighted as an outcome of directionally motivated reasoning. This fosters us-versus-them comparisons and contributes to, rather than mitigates, the polarized political climate. As such, outgroup derogation is also not a viable strategy for overcoming directionally motivated reasoning.

A third way that individuals bolster their self-esteem is through self-affirmation. When individuals are faced with a self-esteem threat in one domain, they often bring to mind other domains where they possess strengths (e.g., I failed the math test, but I’m great at writing). This affirmation of other self-relevant traits allows individuals to repair

and restore their self-esteem, while simultaneously absorbing the threatening information (Sherman & Cohen, 2006).

Self-affirmation, compared to the other two strategies outlined, works by a different mechanism. This is, quite arguably, the least defensive of the three strategies outlined above. That is, individuals do not discount the information or the party giving the information, but instead focus on other positive aspects of the self. A political example would look like the following: a Democratic voter feels that both business experience and education experience are important qualities for a candidate to possess. The voter acknowledges that the Republican candidate has more military experience than the Democratic candidate. However, the voter reminds himself that the Democratic candidate has a stronger track record on education policy in his state. In this hypothetical, the Democratic voter is absorbing potentially threatening information – that a member of a disfavored outgroup is better in one domain than a member of the favored ingroup. However, the self-esteem threat is not mitigated by outright dismissal of the information, as motivated reasoning would suggest, but instead by a reminder that the Democratic candidate, while weak in this domain, performs well in other domains. This is still motivated, in the sense that individuals are trying to repair their self-esteem, but less defensive than other options, as the threatening information is still absorbed, rather than discounted outright. The idea that threatening information is absorbed and acknowledged makes self-affirmation the ideal mechanism to explore further from a campaign standpoint as well. For campaigns to recruit potential persuadable voters, they must be able to highlight situations where individuals are not aligned with their party. However,

this information can be inherently threatening to individuals. As such, any potential strategy for overcoming motivated reasoning needs to both mitigate the self-esteem hit but allows for the incorporation of counter-attitudinal information. Self-affirmation meets both of these criteria.

The Role of Affirmation

Self-affirmation theory is often discussed as a potential mitigator of biased processing. In their review of self-affirmation theory, Sherman and Cohen (2006) lay out four tenants, as outlined below:

1. People are motivated to protect their self-concepts (e.g. inferences about themselves)
2. When these self-concepts or inferences are challenged, people respond defensively
3. However, the self-system is flexible
4. Self-affirmation can be achieved through other activities

Tenets one and two clearly lay out the mechanisms underlying directionally motivated reasoning. However, tenants three and four present an interesting aspect of the self. Self-concepts are not generally thought to be defined by only one value or belief or trait. Thus, self-affirmation theory suggests that affirming traits of oneself can actually reduce the dissonance or confidence gap that results in directionally motivated reasoning. Research on cognitive dissonance found that allowing people to affirm one of their own beliefs or values mitigated the dissonance effect (Steele & Liu, 1983). When participants had the chance to affirm one of their own values, they were less likely to respond negatively to

self-threatening information. Furthermore, the affirmed value did not have to be in any way related to the value or attitude being threatened.

However, self-affirmation also works when participants are able to reaffirm the value that is being challenged. In a study by Cohen et al. (2005), the authors gave participants the opportunity to affirm either their political identity (partisanship, ideology, etc.) or their issue attitudes toward the issue being discussed in the experiment (e.g. attitudes toward abortion). Somewhat paradoxically, they found that those who were given the chance to affirm their partisan identities or their issue attitudes were more open to compromise in a subsequent negotiation regarding that issue (e.g., abortion supporters/opponents were more open to compromise when they had been given the opportunity to affirm either their political identity or their issue attitudes).

The underlying mechanism is thought to work in the following way. Directionally motivated reasoning in the face of counter-attitudinal information occurs because the confidence in one's values, beliefs or attitudes is threatened. This creates a self-esteem drop. Self-affirmation is thought to work by allowing participants to remember why they hold the views they do, which would create a type of "confidence buffer," so they are confident in the opinions they hold. Thus, counter-attitudinal information becomes less threatening because individuals are more self-confident (Sherman & Cohen, 2006). In essence, the opportunity to affirm one's values or beliefs offers a type of self-validation, which raises/bolsters the specific state self-esteem of the individual. However, though self-affirmation remains a viable strategy for overcoming directionally motivated

reasoning, the question becomes how campaigns can utilize this tool in the creation of political advertising messages.

Operationalizing Self-Affirmation

There are two main considerations when trying to induce feelings of affirmation from a third party source. The first is the nature of the message- other-sourced messages are by nature different than the self-talk that individuals engage in to affirm themselves. The second consideration is that the same types of prompts cannot be used in other-induced affirmation that are typically used when self-affirmation is studied. In past work, affirmation is typically induced by asking participants to either think, write, or speak about why they hold the values they do (Sherman & Cohen, 2006). This is a self-reflexive process that allows individuals to confirm for themselves that their attitudes and values are correct and well thought out, thus creating the necessary self-esteem buffer. However, for the purposes of this study, a messaging strategy must be found that preserves the key elements of self-affirmation prompts while controlling for the type of language that would a) be natural from a third party and b) be natural from a political source.

The beliefs behind the effectiveness of the self-prompt is that affirmation of values provides a confidence buffer for individuals and the integrity of the self is preserved (Sherman & Cohen, 2006). In the case of politics, however, the attack on salient group identities (i.e. political party) constitute a threat to the individual's self-esteem as well. Negative political advertising presents an attack on a member of the in-group, which is internalized by all members of the in-group. As such, the worthiness of

the group must be affirmed. Past research has generally looked at this phenomenon by having participants affirm an unrelated value, yet it is possible to affirm the targeted value. Cohen et al. (2007) had individuals affirm their beliefs on abortion and then participate in a discussion of abortion policy with a different-minded other. Those given the opportunity to affirm their abortion beliefs prior to the discussion were more open to compromise and understanding. As such, it is possible to affirm the targeted value, not just an unrelated value. However, the difficulty lies in translating this message strategy into a political advertising context. An advertising strategy from the product advertising field, two-sided advertising, may provide insight into the necessary structure for affirmatory political advertising.

Two-sided Advertising

Two-sided messaging has a long history in the literature on persuasion. Dippoye (1977) showed that subjects were more persuaded by two-sided messaging when they knew that a context was explicitly persuasive. Two-sided messaging can also enhance attitude certainty as well as create attitudes that are more likely to influence behavior (Rucker, Petty, & Brinol, 2008). Additionally, two-sided messaging has been shown to lead to increased resistance to counter-persuasion (McCroskey, Young, & Scott, 1972).

Two-sided advertising, defined as advertising containing both positive and negative claims about a brand, has been demonstrated to improve a large range of desired outcomes from organizations, including increased source credibility (Bohner, Einwiller, Erb, & Siebler, 2003; Kamins & Assael, 1987; Pechmann, 1992), a more positive attitude toward the sponsoring brand (Etgar & Goodwin, 1982; Golden & Alpert, 1987;),

increased purchase intention for the sponsoring brand (Golden & Alpert, 1987; Etgar & Goodwin, 1982; Kamins & Marks, 1987) and decreased counter-arguing (Kamins & Assael, 1987), although these effects are specific to the context of product advertising. Additionally, two-sided advertisements are generally more effective for those who previously held either a negative or neutral attitude toward the brand (Eisend, 2006; Crowley & Hoyer, 1994). However, it does not make sense to extrapolate too far from product advertising findings to political advertising contexts, due to the differing motivations of individuals.

That said, the idea of a two-sided political advertisement may provide structure to the affirmatory message needed in a political advertising context. To start, the idea of two-sided advertising is to provide both information that benefits the sponsor and information that does not benefit the sponsor. It is not enough to simply differentiate based on tone (e.g. positive vs. negative or pro vs. con) because there are ways that an ad could be two-sided in nature, yet only provide positive or “pro” information. As such, the true nature of the two-sided advertisement is to provide information that could both help and harm (in the mildest sense of the word) the sponsor of the advertisement. Therefore, if an advertisement is broken down into the sum of its arguments, a two-sided advertisement contains arguments that both benefit and do not benefit the sponsor of the ad.

Though not necessarily “affirmatory” in nature, these types of message strategies can be adapted to an affirmation context. The self-affirmation mechanism works as a form of *self*-validation (Sherman & Cohen, 2006). However, the goal of using political

advertising as a message medium is to test strategies of *other*-induced affirmation (i.e. affirmation by others).

However, the concept of affirmation can easily be translated into an other-induced message (although the effectiveness of such a translation remains to be seen). The strategy of self-affirmation requires individuals to affirm beliefs that they already hold. This effect could be replicated in a political advertisement by affirming current beliefs of out-party members. This could take a variety of forms (to be discussed further in Chapter II) but would contain either negative information about the sponsor of the advertisement or positive information about the target of advertisement (as out-party members exposed to a negative political advertisement targeting their preferred candidate would presumably have negative beliefs about the sponsor and positive beliefs about the target). To the extent that two-sided political advertising can be adapted to contain affirmatory statements, it has the potential to serve as an affirmatory message medium. Chapter II details the argumentation structure in more detail.

Chapter II: Operationalizing Affirmatory Messaging

As previously stated, the main goal of this dissertation is to test the effectiveness of affirmatory messaging at overcoming directionally motivated reasoning in the face of counter-attitudinal political advertising. The previously reviewed literature suggested that the two-sided advertising structure could present a possible mechanism for operationalizing affirmatory messaging, but only to the extent the message contains information that affirms prior beliefs of the out-party voters exposed to the message. This chapter begins by further detailing the specifics of what such an argument would look like.

At its most simple conceptualization, there are two types of arguments that exist in the two-sided advertising context: arguments that support the sponsor and arguments that do not support the sponsor.⁴ However, there are a variety of argument information types that can both support and not support the sponsor. Take political advertising as an example. Within traditional political advertisements, there is either information that is positive about oneself or negative about the opposition. Traditionally, these are the two types of information (positive self/negative other) that benefit advertising sponsors. Saying positive things about yourself and negative things about your opposition is presumed effective for persuasion. Neither of these types of arguments is meant to support the opposition. From the viewpoint of an out-party viewer, their favored

⁴ Quite obviously, it is also possible that neutral statements exist as well. However, this dissertation is specifically concerned with persuasive arguments, not neutral statements. Given that the intent of political advertising (and advertising more generally) is to persuade, it is assumed that neutral statements do not make up the majority of political advertisements.

candidate is being attacked (likely to result in directionally motivated reasoning) or a disliked candidate is discussing positive things about himself or herself and his or her party (which out-party voters are unlikely to believe, given the counter-arguing effect of directionally motivated reasoning).

For affirmation to occur, the opposite type of argument structure must also be present. That is, the advertisement must contain information that is either positive about the opposing candidate or negative about the sponsor of the advertisement. Both of these argument types would be perceived as “non-beneficial” to a sponsor as there is little perceived motivation or reward (Kelly & Michaela, 1980) for saying things that either hurt oneself (i.e., negative self) or help the competition (i.e., positive other). As such, the working definition of affirmatory messaging in the context of this dissertation is any message that contains *both* arguments that support the sponsor and arguments that do not support the sponsor.

The nature of the two-sided advertisement is to contain a mix of different types of information (i.e., a mix of positive information about the sponsor, negative information about the sponsor, positive information about the target or negative information about the target). Table 1 outlines the full cross of these four types of arguments yielding eight unique argument structure possibilities in an affirmatory messaging context. Six of the messages outlined do not represent affirmatory messaging (defined here as containing both arguments that support the sponsor and arguments that do not support the sponsor) and can be immediately discarded as a potential argument structure for an affirmatory message.

Table 1

Potential Argument Combinations in Two-Sided Messages

	Negative information about the source	Negative information about the target	Positive information about the source	Positive information about the target
Negative information about the source	Message 1	Message 2	Message 3	Message 4
Negative information about the target		Message 5	Message 6	Message 7
Positive information about the source			Message 8	Message 9
Positive information about the target				Message 10

Message five, which contains only negative information about the targeted candidate, represents traditional purely negative political advertising. Message six represents traditional comparative political advertising, as it contains negative information about the targeted candidate and positive information about the sponsor. Message eight contains only positive information about the sponsor. These three message structures do not meet the definition of affirmatory messaging because they contain only information that supports the sponsor of the advertisement.

Messages ten, four and one also do not meet the definition of affirmatory advertising, as they contain *only* information that would be considered non-supportive of the sponsor of the advertisement. Message ten contains only positive information about the targeted candidate, message one contains only negative information about the sponsoring candidate and message four contains negative information about the sponsoring candidate and positive information about the targeted candidate. This leaves four possible message structures (two, three, seven and nine) that represent true affirmatory messages. However, choosing which message structure to use requires a quick look back to the previous chapter.

Message five, the purely negative message (all negative information about the targeted candidate) is of specific interest to this dissertation, as it represents the most common type of political advertising. Wesleyan Media Project estimates of political advertising content from 2012 show that purely negative advertising represented the most dominant category of political advertising expenditures (58.5% of advertisements for Obama and 49.2% of advertisements for Romney). By comparison, the Obama campaign advertisements contained on 14.4% positive advertisements and 27% comparative advertisements. The Romney campaign advertisements contained only 20.4% positive advertisements and 30% comparative advertisements. Both campaigns produced significantly more purely negative advertisements, making this type of advertisement ideal for the purposes of this dissertation (i.e. trying to make a highly used form of advertising more effective). Additionally, directionally motivated reasoning effects occur most often in the face of negative political advertising. As such, an affirmatory message

that most closely resembles traditional attack advertising would provide campaigns with the most insight. Arguably, the main distinctive feature of negative political advertising is that it points out negative aspects of the targeted candidate. As such, the closest match to this type of advertising would be an affirmatory message that a) focuses solely on the targeted candidate and b) contains negative statements about the targeted candidate.

In light of these requirements, messages three and nine can be discarded⁵.

Message three contains only statements about the sponsor, with no focus on the targeted candidate. Message nine contains information about the targeted candidate, but also information about the sponsor as well. Additionally, all the information in message nine is positive, making it incomparable to traditional attack advertising. This leaves messages two and seven for consideration as an appropriate affirmatory message strategy. Message two contains negative information about the targeted candidate but also contains negative information about the sponsor. Message seven contains both positive and negative information about the targeted candidate. Of these two messages, only message seven meets the requirements for being directly comparable to traditional attack advertising. Message seven contains *only* information about the targeted candidate and also contains negative information about the targeted candidate. The only difference between message seven and traditional attack advertising is the inclusion of some positive information about the targeted candidate. As such, message seven was adopted as the affirmatory

⁵ It is important to re-emphasize that all four of these messages do represent forms of affirmatory messaging. Their main reason for being discarded is that they are not directly comparable to traditional attack advertising.

message structure and message five (the traditional attack ad) was adopted as the non-affirmatory message structure.

The non-affirmatory message, as discussed previously, should lead out-party voters to engage in a high level of directionally motivated reasoning, as the negative information about an in-group member should constitute a self-esteem hit. The affirmatory message should lead to a reduction in motivated reasoning (compared to the non-affirmatory message) among out-party members due to the presence of affirmatory (i.e. validating) information (i.e. positive information about an in-group member). However, directionally motivated reasoning in and of itself is defined (as seen above) solely through the outcomes it results in (attitude polarization, counter-arguing with information, outgroup and source derogation, and vote intention). As such, to look for evidence of reduced directionally motivated reasoning, one would look for decreases in directionally motivated reasoning *outcomes*. The specific outcomes under investigation here, as discussed previously, include cognitive outcomes (i.e., counter-arguing), attitudinal outcomes (i.e., attitude polarization and source credibility) and behavioral outcomes (i.e., vote intention). As such, this first experiment posits the following hypotheses:

H1: Attitude polarization scores will be stronger among out-party voters in the non-affirmatory message condition as compared to out-party voters in the affirmatory message condition.

- H2: Out-party voters in the non-affirmatory message condition will produce a greater number of counter-arguments than out-party voters in the affirmatory message condition.
- H3: Outgroup derogation scores will be stronger among out-party voters in the non-affirmatory message condition compared to out-party voters in the affirmatory message condition.
- H4: Source credibility scores will be lower among out-party voters in the non-affirmatory message condition compared to out-party voters in the affirmatory message condition.
- H5: Vote intention for the non-favored candidate will be lower among out-party voters in the non-affirmatory message condition compared to out-party voters in the affirmatory message condition.

Additionally, the role of group-based self-esteem in prompting directionally motivated reasoning is under investigation. The above-reviewed literature posits that exposure to negative information about a favored candidate results in a drop in social, state self-esteem. This leads voters to engage in directionally motivated reasoning, in an attempt to bolster their sense of self. Thus, social state self-esteem occupies a mediational role, such that exposure to counter-attitudinal information leads directly to a drop in social state self-esteem which in turn leads voters to engage in directionally motivated reasoning, in an attempt to bolster their self-esteem. However, in the case of the affirmatory message, no drop in social state self-esteem should occur, because the

presence of affirmatory information should provide a buffer against the social state self-esteem drop. More formally:

H6: Social, state self-esteem scores will be lower among out-party voters in the non-affirmatory message condition as compared to out-party voters in the affirmatory message condition.

Finally, of particular interest to this first experiment is what happens to the other segment of voters exposed to these advertisements: in-party voters who support the sponsor. In the case of the non-affirmatory advertisement, there is no clear motivation for engaging in directionally motivated reasoning as outlined here⁶, as there is no specific threat to group-based self-esteem. The information presented would simply confirm what in-party members already believed—that the targeted out-party candidate was flawed. What happens to in-party members in the case of the affirmatory message is less clear. It is possible that directionally motivated reasoning outcomes could increase, but only to the extent that positive information about a non-preferred candidate constitutes a group-based self-esteem threat. In the case of group-based self-esteem, positive information about non-preferred outgroup member does not carry the same weight as negative information about preferred in-group members. However, in the specific case of political

⁶ Past work shows that individuals do engage in forms of motivated reasoning even when they encounter information that agrees with their prior attitudes and beliefs (Lodge & Taber, 2013). However, the focus of this dissertation is limited quite narrowly to a specific case of motivated reasoning, where defensive reactions to group-based self-esteem threats occur. In the case of confirmation biases (Lodge & Taber, 2013; Lord, Ross & Lepper, 1979), there is no threat to group-based self-esteem, as people are simply less likely to carefully scrutinize information that agrees with their prior beliefs. As such, this type of motivated reasoning outcome remains beyond the scope of this specific dissertation.

advertising, positive information about a non-preferred outgroup member may be construed as a threat since it would be coming, ostensibly, from a trusted in-group member. In that sense, it is possible that in-party members may see the sponsor as betraying the in-group. However, there is not enough literature on the topic to confidently hypothesize a directional outcome. As such, the following research questions are posited:

- RQ1: Are there differences in attitude polarization among in-party voters between the non-affirmatory and affirmatory messages?
- RQ2: Are there differences in counter-arguing among in-party voters between the non-affirmatory and affirmatory messages?
- RQ3: Are there differences in outgroup derogation among in-party voters between the non-affirmatory and affirmatory messages?
- RQ4: Are there differences in source credibility evaluations among in-party voters between the non-affirmatory and affirmatory messages?
- RQ5: Are there differences in vote intention among in-party voters between the non-affirmatory and affirmatory messages?
- RQ6: Are there differences in self-esteem among in-party voters between the non-affirmatory and affirmatory messages?

These hypotheses and research questions form the basis for the first experiment. However, before turning to the details of the first experiment, it was necessary to focus on the construction of the stimuli for the first experiment. Four different stimuli needed to be constructed for the first experiment, representing each of the two message styles (i.e. non-affirmatory versus affirmatory message) and varying the political party of the

sponsor (Democrat versus Republican). The rest of this chapter details the three pilot tests used in the construction of the stimuli for the first experiment.

Pilot Test 1

The goal of the first pilot test was to test both voter comprehension of the arguments presented in the advertisement as well as perceived similarity to previous political advertising. This pilot test was necessary to ensure that participants were able to a) comprehend the affirmatory structure and b) recognize the dissimilarity of this advertising format.

Stimuli. For the first pilot test, four direct mail pieces were constructed. Each direct mail piece contained either no affirmatory messaging or affirmatory messaging. Additionally, in each direct mail piece, the sponsor was either a Republican or a Democrat. As such, there were four stimuli combinations: non-affirmatory with a Republican sponsor, affirmatory with a Republican sponsor, non-affirmatory with a Democratic sponsor and affirmatory with a Democratic sponsor (see Appendix A for stimuli). The front side of both affirmatory ads were the same, regardless of party and contained generic statements about the accomplishments of the target politician (helping families make ends meet, bringing heroes home, getting assembly lines humming again). The front side of both non-affirmatory ads were the same, regardless of party, and contained generic statements about the failures of the target politician (families failing to make ends meet, heroes still abroad, assembly lines shut down).

The back side of the Republican sponsor ads (both affirmatory and non-affirmatory) attacked the target candidate on issues of Republican importance (8%

unemployment, uncontrolled deficit spending, harsh proposed gun legislation), while the back side of the Democratic sponsor ads attacked the target candidate on issues of Democratic importance (massive cuts to welfare, harsh abortion laws, tax breaks for business).

Participants. 203 participants were recruited using Amazon's Mechanical Turk service and were paid \$0.50 for their participation. MTurk allows requesters (i.e. the researcher) to post a HIT (human intelligence task, in this case, the experiment) and workers complete the HIT (the experiment), enter a confirmation code and are compensated for their time. Though MTurk has been criticized for the validity of certain variables (see Kahan, 2013) scholarship on the validity of Mturk samples for experimentation have been readily established (Berinsky, Huber, & Lenz, 2012; Casler, Bickel, & Hackett, 2013). Generally, MTurk is considered to be more representative than convenience samples (Berinsky et al., 2012). Additionally, liberals and conservatives on MTurk tend to be psychologically similar to liberals and conservatives in the general population (Clifford, Jewell, & Waggoner, 2015).

Participants were randomly assigned to view one of four political advertisements: non-affirmatory with a Republican sponsor, non-affirmatory with a Democratic sponsor, affirmatory with a Republican sponsor and affirmatory with a Democratic sponsor. Due to the brief nature of the pilot test, no demographic data was collected on participants. The mean party identification score was 3.60, suggesting a slight lean toward the Democratic side of the scale.

Questionnaire. After viewing one of the four ads, participants were asked questions designed to assess their comprehension of the advertisement as well as the perceived similarity of the ad to previous political ads (the complete questionnaire can be found in Appendix B)

Comprehension. Comprehension was assessed using two manipulation check questions. The first question was a multiple choice question that asked participants, “Which of the following do you believe is the best description of the information in the ad you just viewed?” Response options included “This advertisement contained only negative/only positive/both positive and negative statements about the subject of the advertisement, Steven Morris.” The second question was a multiple choice question that asked participants “The politician who created this advertisement, David Sanders/Steven Morris, is most likely a...” with response options that included “Democrat”, “Republican”, “Independent” and “Don’t know.” Additionally, participants were asked how confident they were in their assessment of each politician’s political party. Confidence was measured on a five point scale ranging from “not at all confident” to “extremely confident.”

Perceived similarity. The question designed to measure perceived similarity asked participants “How similar was the ad you just saw to other ads you have seen in the past?” Perceived similarity was measured on a five point scale ranging from “not at all similar” to “extremely similar.”

Analyses. To assess the comprehension of participants, the percentage of participants who got each comprehension question correct was examined. To assess the

perceived similarity, a one-way ANOVA was conducted, comparing the perceived similarity scores of each condition (Republican non-affirmatory, Democratic non-affirmatory, Republican affirmatory and Democratic affirmatory). Bonferroni-adjusted post-hoc pairwise comparisons were conducted to look for individual differences between conditions and to account for the effect of multiple comparisons. It was expected that the affirmatory advertisements would have significantly lower perceived similarity scores than the non-affirmatory advertisements but that there would be no difference between the advertisements of the same argument structure.

Results. *Comprehension.* Table 2 details the comprehension results of the first pilot. Overall, a strong majority of participants were able to correctly identify the tone of the statements in each condition (Affirmatory, Republican sponsor: 83%; Non-affirmatory, Republican sponsor: 88%; Affirmatory, Democratic sponsor: 86%). However, the affirmatory, Democratic sponsor condition was problematic. Only 63% of participants were able to correctly identify the tone of the statements in the advertisement (both positive and negative), and there was no clear, favored wrong answer. Table 2 details the results of the party identification comprehension questions. Overall, a strong majority of participants were able to accurately comprehend the political party of each candidate.

Perceived similarity. The perceived similarity scores for the affirmatory ads were significantly lower than either of the non-affirmatory ads ($F(3, 196) = 12.35, p = .00$). The affirmatory ad with the Republican sponsor was perceived as more dissimilar to usual political advertising than the non-affirmatory ad with the Republican sponsor

(Mean difference = $-.68$, $SE = .20$, $p = .005$) and the non-affirmatory ad with the Democratic sponsor (Mean difference = -1.07 , $SE = .20$, $p = .000$). The affirmatory ad with the Democratic sponsor was also perceived as more dissimilar to usual political advertising than the non-affirmatory ad with the Republican sponsor (Mean difference = $-.57$, $SE = .20$, $p = .029$) and the non-affirmatory ad with the Democratic sponsor (Mean difference = $-.97$, $SE = .20$, $p = .000$). Additionally, the perceived similarity scores of the affirmatory ads were not significantly different from each other (Mean difference = $-.11$, $SE = .20$, $p = 1.00$) and neither were the scores of the non-affirmatory advertisements (Mean difference = $-.40$, $SE = .20$, $p = .33$)

Table 2

Experiment One, Pilot Test One Results

	% who correctly identified tone of statements	% who correctly identified Sponsor PID	% who correctly identified Target PID	Perceived similarity (1-5, 1=low similarity)
Affirmatory, Republican Sponsor	83%	82%	75%	2.58
Affirmatory, Democratic Sponsor	63%	78%	71%	2.69
Non-affirmatory, Republican Sponsor	88%	84%	74%	3.26
Non-affirmatory, Democratic Sponsor	86%	82%	80%	3.65

Overall, the results of the first pilot test suggested that there was a problem with the affirmatory advertisement that had a Democratic sponsor. While none of the other ads had major differences in percentage of people who were correctly able to identify the argument structure and the party identification of the target/sponsor, this particular advertisement scored much lower (over 20% less correct identification). Although the perceived similarity scores suggest that voters still perceived the difference, the relatively low percentage of participants who were able to correctly identify the argument tone was concerning. Given the relatively small sample sizes of the original pilot test (~50 participants in each condition), a second pilot test, with just the affirmatory Democratic sponsor advertisement, was run, to ensure that the original results were not simply an aberration.

Pilot Test 2

The second pilot test was run using only the problematic advertisement from the first pilot test (affirmatory, Democratic sponsor). No changes to the stimuli were made and the goal of this pilot test was to either confirm or disconfirm the results of the first pilot using a different sample.

Participants, procedure and analysis. 54 people participated in the second pilot test and were recruited from Amazon's Mechanical Turk. Participants were paid \$0.50 for their participation. Similar to the previous pilot, the sample had a mean party identification score of 3.36, indicating a slight lean toward the Democratic side of the scale. Participants were asked to view the affirmatory advertisement with the Democratic sponsor and then answer the exact same comprehension and perceived similarity

questions as in the first pilot. However, only the results of the comprehension questions were examined. To analyze the results, the percentage of participants who correctly identified the argument tone as well as the party identifications of both candidates was examined.

Results. In the second pilot test, 76% of participants were able to correctly identify that the ad contained both positive and negative statements about the target. 88% were able to correctly identify the sponsor's party identification and 94% were able to correctly identify the target's party identification. Though the party identification of the sponsor/target improved from the first pilot test (74% correct identification of the sponsor and 71% correct identification the target in Pilot 1), the correct identification of the argument structure was still almost 10% lower than the other three conditions. Additionally, in the second pilot, the most commonly chosen wrong response was that the advertisement contained only negative statements about the subject of the ad (18%). This suggested that there was perhaps something in the language of the ad that voters were incorrectly interpreting as negative.

Pilot Test 3

One possible explanation for the findings of the first and second pilot test was the language structure on the front page of the direct mail piece. Though the three statements on the front were designed to be politically neutral ("everyday families making ends meet," "our heroes coming come," and "assembly lines humming again"), it is possible that the first and last statements are more associated with Democratic policies (i.e. welfare and unions) and are not considered neutral. As such, voters may view these

statements as non-affirmatory when used to describe the contributions of a Republican candidate. In essence, voters may be able to more clearly distinguish these statements as affirmatory if they seem to be more associated with Republican policies. As such, the statements on the front of the affirmatory piece were changed (see Appendix C) to be weakly associated with Republican policies (“small businesses making ends meet,” “protecting America at home and abroad,” and “stock market recovering quickly”). The non-affirmatory, Democratic sponsor piece was changed as well to reflect these changes (“Small businesses not making ends meet,” “Failure to protect America at home and abroad,” and “Stock market recovering sluggishly”).

Participants, procedure and analysis. This pilot test examined the comprehension and perceived similarity of both new stimuli pieces (affirmatory, Democratic sponsor and non-affirmatory, Democratic sponsor). 104 participants were recruited through Amazon Mechanical Turk and were paid \$.50 in exchange for their participation. Similar to past pilots, the sample was slightly democratic ($M = 3.07$, $SD = 1.89$). Participants were shown either the new, non-affirmatory, Democratic sponsor advertisement or the new, affirmatory, Democratic sponsor advertisement. Following that, participants were asked the exact same comprehension questions as the previous two pilots. To analyze participant comprehension, the percentage of participants who correctly answered each of the three comprehension questions was examined.

Results. The language change appeared to make a difference in the comprehension of participants in the affirmatory condition. 92.2% of participants were able to correctly identify that the advertisement contained both positive and negative

arguments about the sponsor. This was a large improvement over the comprehension of both pilot one (63% correct) and pilot two (76% correct). Additionally, the language change did not drastically change the comprehensibility of the non-affirmatory advertisement (80.4% correct). Furthermore, a majority of participants were able to accurately identify the political party of both the sponsor (96.1% correct) and the target of the advertisements (91.3% correct).

In short, the language change made a noticeable difference in comprehension of the affirmatory advertisement. As such, the new stimuli were adopted in place of the original and the final stimuli for the first experiment can be seen in Appendix C. Chapter III describes the first experiment in more detail.

Chapter III: Experiment One

The second chapter outlined a series of hypotheses and research questions. These hypotheses were designed to examine the impact of affirmatory messaging on five key outcomes: counter-arguing, attitude polarization, outgroup derogation, source credibility and vote intention. The first experiment was designed to test these, using a 2 x 2 experiment crossing sponsoring candidate party affiliation (Democratic vs. Republican) and type of message (affirmatory vs. non-affirmatory). Additionally, there was some concern that the thought-listing exercises designed to measure counter-arguing toward the beginning of the survey would bias answers to questions that followed, so only half the sample was given thought-listing questions (detailed below). This resulted in a total of eight experimental conditions (outlined in Table 3).

Method

Procedure. Participants for this experiment were recruited from Amazon's Mechanical Turk and were invited to "participate in a study on politics." Upon entering the survey, participants were asked to consent to participation in this study and were given a list of the risks (none) and benefits (compensation) of participating in the study. Participants were randomly assigned into one of eight conditions (see Table 3 for a summary of all conditions). Next, participants were asked to read short biographies and issues profiles for both fictional candidates, David Sanders and Steven Morris. Participants were told that these were candidates thinking about running in their state in the next five years, but that their names had been changed for the purposes of this experiment. Both candidate biographies were equal in length and both candidates

possessed very similar political qualifications. Their policy positions were structured to clearly indicate to which party each candidate belonged. In addition, the party identification of each candidate was clearly identified within the text. Full text of the issue positions and biographies can be found in Appendix D.

Table 3

Condition Descriptions for Experiment 1

Condition	Condition Description
1	Thought-listing included Democratic sponsor, Republican target Affirmatory advertisement
2	Thought-listing included Democratic sponsor, Republican target Non-affirmatory advertisement
3	Thought-listing included Republican sponsor, Democratic target Affirmatory advertisement
4	Thought-listing included Republican sponsor, Democratic target Non-affirmatory advertisement
5	No thought-listing Democratic sponsor, Republican target Affirmatory advertisement
6	No thought-listing Democratic sponsor, Republican target Non-affirmatory advertisement
7	No thought-listing Republican sponsor, Democratic target Affirmatory advertisement
8	No thought-listing Republican sponsor, Democratic target Non-affirmatory advertisement

Following the biographies, participants were asked to view a potential direct mail piece sponsored by the candidate David Sanders (David Sanders was always the sponsoring politician, while Steven Morris was always the target of the advertisement). Participants saw either an affirmatory ad (an ad that contained both positive and negative statements about the target candidate, Steven Morris) or a non-affirmatory ad (an ad that contained only negative statements about the candidate, Steven Morris). Participants were required to stay on the advertisement page for at least ten seconds before moving on. After viewing the ads, participants were asked to fill out a survey that included measures of counter-arguing, attitude polarization, outgroup derogation, source credibility, vote intention, self-esteem and political control variables (described in detail below). Finally, participants were debriefed, thanked for their time, and provided with a completion code that they could use to receive compensation for their participation.

Participants. Participants for this experiment were recruited using Amazon's Mechanical Turk. For this experiment, participants were paid \$1.00 in exchange for their participation in the experiment. The resulting sample of 849 participants was 46.8% female, 78.2% white (4.8% Hispanic, 2% Native American, 5.3% Asian, and 8.1% Black). The sample had a mean age of 34.6, 33.3% possessed a bachelor's degree (an additional 28.7% possessed "some college education", 12% possessed less education than college and 12.9% possessed some form of advanced degree) and the median income was \$25,000-\$49,999. Party identification skewed Democratic, with 59.7% of the sample identifying as Democratic, 14.6% identifying as Independent and 25.7% Republican.

These are fairly standard party identification percentages for MTurk samples, which skew slightly Democratic (Berinsky, Huber & Lenz, 2012).

Questionnaire. Attitude polarization. Attitude polarization was measured using two separate measures (see Appendix E for full questionnaire). The first measure was a 101-point feeling thermometer for both fictional candidates, where a score of 0 indicates very negative feelings toward a candidate while a score of 100 indicates very positive feelings toward a candidate. The second measure was a single-item 7-point scale that asked respondents to indicate “how likable is David Sanders/Steven Morris,” where one equals “not at all likable,” and seven equals “extremely likable.” To assess polarization, the difference scores between respondents’ preferred candidate (i.e., the candidate with the higher feeling thermometer score) and their non-preferred candidate were taken for each candidate. For both indicators, higher scores are indicative of greater polarization (i.e., a greater difference between the preferred and non-preferred candidate). The feeling thermometer difference scores range from 0-100 ($M = 41.56$, $SD = 28.18$). The likability difference scores range from 0-4 ($M = 1.31$, $SD = 1.08$).

Counter-arguing. Counter-arguing was measured using the thought-listing task outlined by Petty and Caccioppo (1986). Respondents were asked to list any thoughts they had while viewing the ad, up to a total of five thoughts. Then, for each thought, respondents were asked to categorize the thought as either positive, negative or neither positive nor negative and to identify the subject of the thought (Steven Morris, David Sanders, specific political advertisement seen, political advertising generally, none of the

above)⁷. The median number of thoughts reported was three. The median number of negative thoughts reported was two and the median number of positive thoughts reported was one. To determine counter-arguing, the proportion of negative thoughts was calculated for each respondent ($M = .59$, $SD = .36$) by dividing the total number of negative thoughts by the total number of thoughts.

Due to concerns that the thought-listing task would influence subsequent responses to questions later on in the survey, the thought-listing task was administered to only half of the sample. However, as there were not significant differences between the thought-listing and non-thought-listing groups on all key dependent variables, the groups were not analyzed separately.

Source credibility. Source credibility was measured using McCroskey and Teven's (1998) three-part scale consisting of character, competence and goodwill. Each dimension is made up of six semantic differentials. The word pairs for character asked participants to indicate the extent to which each candidate is: honest/dishonest, trustworthy/untrustworthy, moral/immoral, ethical/unethical, phony/genuine, and honorable/dishonorable. The word pairs for competence asked participants to indicate the extent to which each candidate is: trained/untrained, expert/inexpert,

⁷ Independent coders were not used as past research indicates a high correlation between subject and coder ratings of thoughts (Petty et al., 1976). There is precedent for this method in past research (Petty & Cacioppo, 1979). Additionally, the perceptions of the participant were of specific interest to the dissertation. It may be interesting in the future to see whether participant perceptions of positivity and negativity are similar to that of independent coders. Thoughts were constrained to five for two reasons. First, the structure of the survey in an online environment produced limitations on size and space available. Second, the most prominent/relevant thoughts (i.e. those that come first) are of specific interest to this dissertation, as it is theorized that these thoughts are the most indicative of the mindset of the participant.

informed/uninformed, competent/incompetent, intelligent/unintelligent, and stupid/bright. The word pairs for goodwill asked participants to indicate the extent to which each candidate: has/does not have my best interests at heart, is self-centered/not self-centered, is concerned/unconcerned with me, is sensitive/insensitive, cares/does not care about me, and is understanding/not understanding. Though McCroskey and Teven (1999) posit these three dimensions as separate influences on source credibility, an exploratory factor analysis showed that the indicators for all three dimensions loaded best on one factor (see Table 4)⁸, hereafter considered to simply be overall source credibility (David Sanders: $M = 4.48$, $SD = 1.32$; Steven Morris: $M = 4.34$, $SD = 1.20$). Additionally, a reliability test indicates high reliability ($\alpha = .97$).

Outgroup Derogation. As an outgroup derogation scale for party identification did not exist, this study adapted previous work in this area to create a scale that measured derogation of Republicans and derogation of Democrats. Each scale consists of four statements. Participants were asked to indicate how much they agree with each statement (6 point scale, strongly disagree to strongly agree). Participants were asked to agree/disagree with the following statements: “most Republicans/Democrats have America’s best interests at heart,” “most Democrats/Republicans are reasonable, thoughtful voters,” “most Democrats/Republicans believe in the politicians they support,” and “most Democrats/Republicans are trying to destroy our country.”

⁸ One qualification must be added to the EFA. These questions were asked following experimental manipulations that were designed to affect them. This could affect the results of the EFA.

Table 4

Source Credibility Exploratory Factor Analysis Results

	David Sanders	Steven Morris
Trustworthy/Untrustworthy	.862	.862
Ethical/Unethical	.850	.836
Phony/Genuine	.824	.851
Trained/Untrained	.716	.701
Inexpert/Expert	.767	.741
Stupid/Bright	.773	.763
Self-centered/Not self-centered	.703	.589
Insensitive/sensitive	.836	.814
Not understanding/ understanding	.846	.822
Dishonest/Honest	.837	.816
Dishonorable/honorable	.830	.851
Immoral/Moral	.814	.788
Unintelligent/Intelligent	.768	.730
Uninformed/Informed	.800	.780
Incompetent/Competent	.811	.788
Has/Does not have my interests at heart	.837	.784
Concerned/unconcerned with me	.793	.786
Cares/does not care about me	.815	.810
Eigenvalue	11.68	11.13
Percentage of variance explained	64.9%	61.85%

Overall, the scales (Democrat derogation and Republican derogation) had acceptable reliability⁹ (Democrat derogation $\alpha = .81$; Republican derogation $\alpha = .79$). Outgroup derogation was measured by selecting the derogation score for the group that did not match the respondent's party identification ($M = 4.00$, $SD = 1.18$).

Vote intention. Vote intention was measured using a single-item measure that asked respondents to indicate "how likely would you be to vote for David Sanders ($M = 2.77$, $SD = 1.46$). The five-point scale ranged from "not at all likely" to "very likely."

Self-esteem. Self-esteem was measured using four questions (adapted from Luhtanen & Crocker, 1992) designed to measure the feelings of group membership associated with belonging to the Democratic or Republican party (participants were only asked about whichever party they indicated as their own, Independents were not asked the self-esteem questions). Participants were to indicate, on a six point Likert scale (ranging from strongly disagree to strongly agree), how much they agreed or disagreed with the following statements: "I regret that I belong to the Democratic/Republican party," "I am glad to be a member of the Democratic/Republican party," "I feel that the Democratic/Republican party is not worthwhile," and "I feel good about belonging to the Democratic/Republican party." Answers to all four questions were added together and divided by four (questions one and three were reverse-coded) to create a self-esteem scale

⁹ As above, it is possible that the conditions affected the reliability of these scales. However, it is worth noting that a separate reliability analysis for each condition showed no significant differences in reliability across conditions.

ranging from one to six with higher values indicating higher self-esteem ($\alpha = .86$, $M = 4.91$, $SD = .95$).

Party identification. Party identification was measured using two different measures. The first measure was the standard NES branching question, which asks participants “do you identify as a Democrat, Republican, Independent or what?” Next, Democrats and Republicans were asked whether they consider themselves to be a strong or not so strong Democrat/Republican. Independents were asked whether they leaned closer to one party or the other. Independents who indicated that they leaned toward one party or the other were classified as weak partisans, resulting in a seven-point scale running from “Strong Democrat” to “Strong Republican” ($M = 3.08$, $SD = 2.08$).

Additionally, group identification with the Democratic or Republican party was measured for Democrats and Republicans respectively. Group identification was measured using a 4-item scale of partisan identification developed by Huddy, Mason, and Aaroe (2015).

These questions asked participants to indicate “how well does the term Democrat/Republican describe you,” (four point scale ranging from “not at all” to “extremely well”), “when talking about Democrats/Republicans, how often do you use ‘we’ instead of ‘they,’” (four point scale ranging from “never” to “most of the time”), “to what extent do you think of yourself as being a Democrat/Republicans,” (four point scale ranging from “not at all” to “a great deal”) and “how important is being a Democrat/Republican to you” (four point scale ranging from “not important at all” to “extremely important”). These questions are reliable indicators of the overall construct

for both Democrats ($\alpha = .84$, $M = 2.70$, $SD = .67$) and Republicans ($\alpha = .84$, $M = 2.68$, $SD = .65$).

Manipulation check. In order to assess the “newness” of the affirmatory stimuli, participants were asked three questions designed to measure expectancy violation (i.e., how much a stimuli departs from the expected format). Participants were asked three forced-choice, branching questions that included “did you find the content of this ad to be surprising or unsurprising,” “did you find the content of this ad to be expected or unexpected,” and “was this ad similar or dissimilar to political advertisements you have seen in the past?” Once participants had chosen their response, they were asked the extent to which that response choice was true (e.g. slightly surprising, somewhat surprising or very surprising). An independent-samples t-test revealed that participants in the affirmatory condition reported significantly higher levels of expectancy violation, suggesting that the affirmatory ad was more unexpected and unique ($t(621) = -6.28$, $p < .001$).

Results

Each of the hypotheses and research questions posited between-group differences between two independent samples. As such, independent samples t-tests were used to examine each hypothesis and research question.

The first hypothesis posited that among out-party voters (i.e., voters who do not share the same political party as the sponsor of the advertisement), attitude polarization would be higher among those in the non-affirmatory message condition as opposed to the

affirmatory message condition. Attitude polarization was measured using two indicators: likability difference scores and feeling thermometer difference scores.

The first indicator, likability, shows significant differences between the non-affirmatory advertisement and the affirmatory advertisement among out-party voters (Non-affirmatory: $M = 1.36$, $SD = 1.05$; Affirmatory: $M = 1.07$, $SD = .97$; $t(303) = 2.46$, $p = .01$)¹⁰. A post-hoc follow-up shows that this change in polarization is due entirely to more positive attitudes toward the out-party sponsor by participants in the affirmatory message condition. Independent t-tests comparing mean likability scores for the out-party sponsor show significantly higher scores in the affirmatory message condition (Non-affirmatory: $M = 2.37$, $SD = .95$; Affirmatory: $M = 2.56$, $SD = .93$, $t(303) = 1.85$, $p = .07$). However, the two groups show no differences on their likability ratings of the in-party target (Non-affirmatory: $M = 3.29$, $SD = .88$; Affirmatory: $M = 3.38$, $SD = .75$; $t(304) = .96$, $p = .34$). This suggests that the decrease in polarization was entirely driven by improved attitudes toward the out-party sponsor in the affirmatory message condition. As such, the first hypothesis was supported for the first measure of attitude polarization.

The second indicator of attitude polarization was feeling thermometer difference scores. The results of the t-test show significant differences at the .10 level. Out-party voters in the non-affirmatory condition were significantly more polarized than out-party voters in the affirmatory condition (Non-affirmatory: $M = 42.77$, $SD = 28.27$; Affirmatory: $M = 37.58$, $SD = 25.89$; $t(301) = 1.66$, $p = .10$). As such, there was support

¹⁰ Note that higher values represent greater difference between the preferred and non-preferred candidate, meaning that higher values represent greater attitude polarization.

for this second measure of attitude polarization. Overall, the first hypothesis was supported.

The second hypothesis posited that out-party voters in the non-affirmatory condition would counter-argue more than out-party voters in the affirmatory condition. Counter-arguing was measured by dividing the total number of negative thoughts by the total number of thoughts, leading to an overall proportion of negative thoughts. Overall, the results of the t-test suggest that out-party voters in the non-affirmatory condition reported a greater proportion of negative thoughts than out-party voters in the affirmatory message condition (Non-affirmatory: $M = .78$, $SD = .29$; Affirmatory: $M = .62$, $SD = .33$; $t(138) = 3.04$, $p = .00$).¹¹ Further post-hoc analyses suggest, as well, that this difference is driven by a decrease in negative thoughts relative to positive thoughts overall among out-party voters in the affirmatory message condition. Between the two conditions, there was no significant difference in the total number of thoughts generated (Non-affirmatory: $M = 3.54$, $SD = 1.21$; Affirmatory: $M = 3.39$, $SD = 1.24$; $t(138) = -.69$, $p = .49$). However, participants in the affirmatory message condition generated significantly fewer negative thoughts overall than participants in the non-affirmatory condition (Non-affirmatory: $M = 2.75$, $SD = 1.33$; Affirmatory: $M = 2.11$, $SD = 1.36$; $t(138) = -2.82$, $p = .01$). These findings show that the proportional difference in negative thoughts is due to an overall reduction in negative thoughts among out-party voters in the affirmatory messaging condition. As such, the second hypothesis was supported. However, it is

¹¹ It should be noted that for this particular test, the degrees of freedom are much lower because only one half of the sample received the counter-arguing measure, due to potential concerns that the thought-listing task would unduly influence later answers.

worth noting that though these two proportions do differ from each other significantly, both still represent a greater proportion of negative to positive thoughts, suggesting that out-party voters in the affirmatory condition were more positive, but did not tip to the side of wholly positive toward the out-party candidate.

The third hypothesis held that out-party voters in the non-affirmatory condition would engage in more outgroup derogation than out-party voters in the affirmatory condition. However, the t-test showed no significant differences between the two groups (Non-affirmatory: $M = 4.00$, $SD = 1.19$; Affirmatory: $M = 4.03$, $SD = 1.19$; $t(303) = -.23$, $p = .82$). As such, the third hypothesis was not supported.

The fourth hypothesis posited that out-party voters in the non-affirmatory condition would report lower ratings of source credibility of the sponsor of the ad than out-party voters in the affirmatory condition. The findings showed significant differences between the non-affirmatory and affirmatory conditions (Non-affirmatory: $M = 3.54$, $SD = 1.10$; Affirmatory: $M = 3.82$, $SD = 1.13$; $t(287) = -1.75$, $p = .08$). Thus, the fourth hypothesis was supported.

The fifth hypothesis posited that out-party voters in the non-affirmatory condition would show less intention to vote for the out-party sponsor than voters in the affirmatory condition. However, the t-test results suggest that there were no significant differences in vote intention between these two conditions (Non-affirmatory: $M = 1.78$, $SD = 1.05$; Affirmatory: $M = 1.66$, $SD = .93$; $t(304) = .82$, $p = .41$). As such, the fifth hypothesis was not supported.

The sixth hypothesis posited that out-party voters in the non-affirmatory condition would show lower social state self-esteem scores than out-party voters in the affirmatory condition. However, the t-test showed no significant differences between these two groups on self-esteem (Non-affirmatory: $M = 4.91$, $SD = 1.03$; Affirmatory: $M = 4.84$, $SD = .88$; $t(226) = .55$, $p = .58$). As such, the sixth hypothesis was not supported.

Overall, the above reported results suggest that, as far as communicating with out-party voters is concerned, affirmatory messaging may be effective at reducing the outcomes of directionally motivated reasoning. Voters in the affirmatory message condition reported lower attitude polarization, engaged in less counter-arguing and found the sponsor of the advertisement to be more credible. However, these cognitive and attitudinal outcomes did not translate into behavioral intentions, as vote intention showed no significant differences between the groups.

Additionally, the mechanism by which directionally motivated reasoning remains in question given the above-stated results, which showed no significant group differences on self-esteem. Before turning to the research questions, this variable merits further post-hoc investigation.

Post-hoc analyses: Social state self-esteem. One possible explanation for the non-significant differences in social, state self-esteem lies in the measurement of this variable. The questions used to measure social, state self-esteem were designed to tap how satisfied participants are with their membership in the Democratic or Republican party. However, past research has suggested that stronger identification with a political party is also related to greater directionally motivated reasoning outcomes (Lodge &

Taber, 2013). It is possible that rather than measuring actual changes in social, state self-esteem, the self-esteem questions were understood by participants as simply another measure of partisan identification. To the extent that this is true, there should be a high degree of correlation between these two measures for participants. The post-hoc analyses support this interpretation. These two scales are highly correlated with each other ($r = .63, p < .001$). It is possible that these questions are not truly measuring the effect that these ads had on self-esteem, but are instead measuring partisan identity. Though closely related, these are not the same concepts. Therefore, new measures of self-esteem must be considered for the second experiment, as the measures in this particular experiment are too entangled with partisan identity to make any firm conclusions about the role of, specifically, social state self-esteem.

Research questions. Turning to the research questions, this experiment also investigated what would happen to in-party voters who were exposed to affirmatory messages. It is unknown whether positive information about a disfavored target from a favored sponsor would result in the same type of motivated reaction as negative information about a favored target from a disfavored sponsor.

The first research question asked if there were differences among in-party voters between the non-affirmatory and affirmatory message conditions on attitude polarization. Attitude polarization was measured by likability and feeling thermometer difference scores. Turning first to likability, the results of the t-test suggest that in-party voters in the non-affirmatory condition reported greater differences (i.e. more polarization) between their preferred and non-preferred candidates than voters in the affirmatory condition

(Non-affirmatory: $M = 1.53$, $SD = 1.21$; Affirmatory: $M = 1.27$, $SD = 1.05$; $t(320) = 2.08$, $p = .04$). Post-hoc analyses of likability suggest that this difference is due to significant differences in the likability ratings of the targeted, out-party candidate. Voters in the affirmatory condition reported significantly more positive attitudes toward the targeted candidate (Non-affirmatory: $M = 2.13$, $SD = .88$; Affirmatory: $M = 2.41$, $SD = .84$; $t(320) = 3.01$, $p = .00$). There were no differences in likability between the two groups toward the in-party sponsor of the advertisement (Non-affirmatory: $M = 3.56$, $SD = .83$; Affirmatory: $M = 3.59$, $SD = .77$; $t(320) = .32$, $p = .75$).

However, the same pattern of results did not hold for the feeling thermometer polarization scores. For the feeling thermometer differences, there were no significant differences between the non-affirmatory and the affirmatory conditions (Non-affirmatory: $M = 44.69$, $SD = 29.67$; Affirmatory: $M = 41.02$, $SD = 28.44$; $t(318) = 1.13$, $p = .26$). Overall, this pattern of results is not necessarily surprising. Negative political advertising is designed purely to make a candidate look less likable. As such, it is hardly surprising that in-party voters exposed to only negative information about the target reported lower likability scores compared to the sponsor than in-party voters exposed to both positive and negative information about the target. In fact, given that the higher levels of polarization are reported in the non-affirmatory condition, this suggests the absence of directionally motivated reasoning in the affirmatory condition. If in-party voters in the affirmatory condition were going to engage in directionally motivated reasoning in the face of positive information about a disfavored target, than the polarization scores should have been higher in the affirmatory condition as compared to the non-affirmatory

condition. However, that pattern of results is not what is seen here (just the opposite, in fact).

Returning to the research questions, the second research question asked if there were differences in counter-arguing among in-party voters between the non-affirmatory and affirmatory conditions. The results of the t-test suggest that there are no significant differences between the groups (Non-affirmatory: $M = .52$, $SD = 3.6$; Affirmatory: $M = .46$, $SD = .36$; $t(151) = 1.03$, $p = .31$). Overall, in-party voters in both conditions had about the same number of positive and negative thoughts.

The third research question wanted to know if there were differences in outgroup derogation between the non-affirmatory and affirmatory conditions among in-party voters. Again, the results show that there were no significant differences between the non-affirmatory and affirmatory conditions (Non-affirmatory: $M = 4.04$, $SD = 1.20$; Affirmatory: $M = 3.94$, $SD = 1.14$; $t(318) = .73$, $p = .47$).

The fourth research question asked if there were any significant differences among in-party voters between the non-affirmatory and affirmatory conditions on perceptions of source credibility of the sponsor. The results suggest that there were no significant differences between the groups (Non-affirmatory: $M = 5.18$, $SD = 1.06$; Affirmatory: $M = 5.24$, $SD = 1.06$; $t(312) = -.48$, $p = .63$). It appears that producing an affirmatory advertisement would not affect the perceived credibility of the sponsor among in-party voters.

The fifth research question asked if there were any significant differences in vote intention among in-party voters between the non-affirmatory and affirmatory conditions.

Following the same pattern of results, there were no significant differences between these two groups (Non-affirmatory: $M = 3.78$, $SD = 1.08$; Affirmatory: $M = 3.76$, $SD = 1.06$; $t(319) = .202$, $p = .84$).

Finally, the sixth research question asked if there were any significant differences in social, state self-esteem among in-party voters between the non-affirmatory and affirmatory conditions. Surprisingly, there are significant differences between the groups that fit with a motivated reasoning explanation (Non-affirmatory: $M = 5.09$, $SD = .84$; Affirmatory: $M = 4.82$, $SD = 1.02$; $t(246) = 2.27$, $p = .02$). At first glance, it appears that in-party voters who were exposed to the affirmatory condition reported lower social state self-esteem. This would be in line with the motivated reasoning hypothesis, as among in-party voters, the affirmatory message should be more likely to result in directionally motivated reasoning than the non-affirmatory message, as only the affirmatory message would contain information that goes against prior beliefs/attitudes of the *in-party* (keeping in mind that affirmatory refers to an ad that is affirmatory to the *out-party*). However, given the high correlation between self-esteem and partisan identity, another possible interpretation is that voters in the non-affirmatory condition felt even better about their party membership after hearing a litany of negative information about the opposing party's candidate. A post-hoc independent samples t-test of partisan identity shows a similar pattern of results (Non-affirmatory: $M = 2.83$, $SD = .69$; Affirmatory: $M = 2.64$, $SD = .64$; $t(244) = 2.20$, $p = .03$). As such, it is impossible to determine, given the confounded nature of the self-esteem measure, whether the affirmatory advertisement

caused a hit to the self-esteem or the non-affirmatory advertisement led to a reinforcement of partisan identity.

Overall, the results of the research questions suggest that there is little downside for candidates in using an affirmatory message. There is no clear evidence of directionally motivated reasoning in the affirmatory advertisement condition among in-party voters, suggesting that candidates would not face a backlash among their own party members for saying something positive about their opposition.

Discussion

The results from the first experiment suggest that contrary to popular belief directionally motivated reasoning may not be the inevitable conclusion of exposure to information that disagrees with prior attitudes, beliefs and identities. The results of this study suggest that communication strategies that directly attempt to bolster the underlying identity of the individual, prior to presenting disagreeable information, may be effective at reducing counter-arguing and attitude polarization among voters as well as improving perceptions of source credibility.

The affirmatory message, which contained statements designed to reinforce prior beliefs among out-party voters, reduced the amount of attitude polarization. Additionally, this change in polarization was driven entirely by more positive attitudes toward the out-party sponsor among voters in the affirmatory message condition. This is an important distinction, because it supports the contention that the polarization levels are reduced because attitudes toward the sponsor are improved. It is possible that polarization levels could also decrease in the affirmatory message condition if out-party voters in the

affirmatory condition rated the target lower than individuals in the non-affirmatory condition. This would not be as clearly supportive of a motivated reasoning interpretation. However, improved attitudes toward a relatively disliked candidate suggest that this type of affirmatory messaging could, over the course of a campaign, change attitudes toward a candidate.

Additionally, the inclusion of affirmatory information also significantly reduced counter-arguing among voters. The affirmatory message led to a significantly lower proportion of negative to positive thoughts. Furthermore, this difference was driven entirely by a reduction in negative thought generation by voters in the affirmatory message condition. There were no differences in the overall number of thoughts generated, suggesting that voters in both experimental conditions spent at least some time thinking about the information presented in the advertisement. The affirmatory message does not reduce actual thinking about the information presented. However, it does appear to reduce the amount of counter-arguing in which participants engaged. Again, this finding is directly supportive of the contention that motivated reasoning can be mitigated.

Finally, affirmatory messaging also raised evaluations of source credibility of the sponsor among out-party voters in the affirmatory message condition. This is important given that perceptions of source credibility are directly linked to the likelihood that voters will be open to persuasion (e.g. Greenburg & Miller, 1966; Milburn, 1991). Politically, higher source credibility also helps lower reactivity to negative political advertising (Yoon, Pinkleton & Ko, 2005), suggesting that source credibility effects from exposure to the affirmatory message may carry over to subsequent advertising exposure.

However, this experiment failed to identify any significant behavioral differences as a result of the affirmatory message. There are two possible explanations for this finding. The first is that, while cognitive and affective outcomes of motivated reasoning can be overcome, they are not strong enough to change voting behavior. This is a distinct possibility, to the extent that cognitive and affective variables do not directly change the political make-up of the government. However, voting and vote choice have more lasting consequences. Giving a disfavored party more control within the government may be too large of a perceived detriment for voters to be willing to take the risk.

A second possible explanation is that even if vote intention does not change, other types of political behavior might. Choosing which politician to vote for is essentially a zero-sum game. A vote for one politician means that one cannot vote for any other politician. However, there are political domains where the outcome is less win/lose. One area is policy support. Prior motivated reasoning literature suggests that motivated reasoning affects policy support as well as vote choice. However, this particular experiment offers no direct way to examine policy support, given that participants are asked to choose between potential Congressional candidates, not potential policies.

Theoretically, this first experiment extends the work on motivated reasoning by attempting to unpack the black box of motivated reasoning further. Focusing on a specific subset of directional goals (i.e. directional goals in the service of attitude defense), this study shows that affirming self-relevant identities of voters can actually reduce the need to engage in directionally motivated reasoning and can mitigate many of the motivated

reasoning outcomes, reducing counter-arguing and attitude polarization and increasing evaluations of source credibility.

One question that this study was attempting to answer was whether the inclusion of positive information about a disfavored candidate, provided by a favored candidate, would evoke a motivated reasoning response in in-party voters. If this occurred, this could potentially be problematic for campaigns and they may experience a backlash effect of running these affirmatory messages, thus alienating their base. This is problematic as losing votes from the base would offset any potential gains made in winning over out-party voters. However, the results of this particular experiment suggest that in-party voters remained largely unaffected by the inclusion of positive information about a disfavored politician in an advertisement.

Among all the indicators of directionally motivated reasoning, only one significant difference emerged among in-party voters: attitude polarization (and only for one indicator of attitude polarization). As discussed briefly in the attitude polarization section, this difference in polarization levels is driven by more positive attitudes toward target of the advertisement in the affirmatory message condition. However, these results are not surprising, given that the affirmatory advertisement did provide positive information about the target. This may serve to improve the overall likability of the targeted candidate. Conversely, it could also be the case that the likability scores reported in the affirmatory condition represent a sort of baseline and that the difference in likability scores is instead the result of a decrease in likability among in-party voters in the non-affirmatory condition. That is, when voters are exposed to only negative

information about a disfavored candidate, their evaluations of likability go down. At present, there is not enough information to adjudicate between these two explanations. However, most importantly to this experiment, neither is consistent with a motivated reasoning explanation.

Additionally, in-party voters in the affirmatory condition showed no other significant differences from voters in the non-affirmatory condition on any of the other motivated reasoning outcomes (counter-arguing, outgroup derogation, source credibility and behavior). This suggests that campaigns could use affirmatory messaging strategies to try and appeal to out-party voters without suffering backlash effects from their own base of voters.

Though this study offers many interesting preliminary insights, there are still questions remaining that it fails to address. The first, and most obvious, limitation of this first experiment is the inconclusive results about the precise nature of the mechanism that leads to directionally motivated reasoning. The proposed mechanism was social, state self-esteem, yet the results show no significant differences between the out-party voter groups on the self-esteem measure. There are a couple of potential explanations for this finding.

The first is that self-esteem is difficult to measure and after the fact self-report measures are not adequately capturing the self-esteem concept. However, a more likely explanation, which is at least partially supported with the data on hand, is that the social, state self-esteem questions (which ask about satisfaction with group belonging) are in fact simply another measure of partisan identification. This seems likely to be the case, given

the high correlation between these two measures. As such, more research needs to be done to try and more accurately measure state social self-esteem absent of partisan identification.

A second limitation of this experiment is the fictitious nature of the campaign. Though participants were able to form attitudes about candidates, those attitudes were new and were not as strong as attitudes that exist toward real candidates during real elections. The attitudes formed were based off partisan identification, but likely lacked the emotional backing that often occurs during actual election campaigns. Therefore, the first experiment represents a weak test of this concept and rests soundly on the assumption that partisan identification would be strong enough to help bolster newly formed attitudes. Though there is evidence that participants were able to form attitudes toward these candidates, a stronger test of an issue where highly polarized attitudes already exist would provide potentially more convincing evidence.

The third limitation is the limited nature of the prior attitudes- perhaps there is something unique about partisanship that lends itself to the positive effects of affirmatory messaging. Additionally, the measurement of social state self-esteem is difficult, as it overlays so much with partisan identity in this particular experiment. As such, measuring social state self-esteem related to a non-partisan attitude may give a cleaner test of the concept that is less entangled with partisan identity. Exploring the effects of this particular communication strategy with different, non-partisan prior attitudes, would be of utility in making generalizations about these findings. As such, the second experiment was designed to address some of these limitations and concerns.

Chapter IV: Designing the Second Experiment

The second experiment was designed to address some of the key limitations from the first experiment. Each of those limitations is addressed briefly here. One important limitation from the first experiment was the artificial nature of the campaign. Directionally motivated reasoning is thought to occur because previously held beliefs and attitudes are challenged by incoming information (Kunda, 1990). The first experiment relied heavily on partisanship to help create attitudes toward previously unknown candidates. Though each candidate represented an average group member (i.e. both candidates held only positions explicitly espoused by their parties), they were previously unknown to participants. Therefore, though participants did report non-neutral attitudes toward their preferred and non-preferred candidates, these attitudes were of recent construction. It is possible that affirmatory messaging would not work as well at overcoming directionally motivated processing when attitudes are stronger and have been held longer. The nature of attitudes is such that stronger attitudes are more resistant to change and persuasive messages are expected to have greater impact on weak attitudes (Krosnick & Petty, 1995). As such, one goal of the second experiment is to test these outcomes in a situation where individuals already hold strong attitudes. This represents the strongest test of the affirmatory messaging hypothesis.

A second important limitation of the first experiment is the unique case of partisanship. The group self-esteem hypothesis suggested that when members or beliefs held by the group are under attack, voters are more likely to engage in directionally motivated reasoning. However, examining directionally motivated reasoning outcomes in

a candidate case creates some unique issues. The first is that it is impossible to distinguish whether it is group membership or personally held attitudes that led participants to engage in more directionally motivated reasoning in the non-affirmatory message condition. In the first scenario, voters engage in directionally motivated reasoning because they value their membership in their favored political party and become defensive when a group member is attacked. In the second scenario, voters engage in directionally motivated reasoning because attitudes that they personally care about are attacked and individuals become defensive against an attack on their own, personal attitudes. Though this seems like a minute difference, it suggests differing strategies for overcoming directionally motivated processing. In the group situation, affirmatory messaging would be tailored to bolster the group belonging while in the individual situation, affirmatory messaging would be tailored to bolster an individual's sense of their own ability to reason about issues.

The first step to adequately adjudicating between these two ideas is to try and establish whether directionally motivated reasoning occurs differently in a partisan versus non-partisan situation. As such, the second experiment tests the effects of affirmatory messaging for an issue that is heavily tied to partisanship (i.e., the parties have taken clear stances on the issue) and an issue that is not heavily tied to partisanship. If there is no difference in directionally motivated reasoning outcomes between the two issues, then there is nothing to suggest that group belonging is to account for greater directionally motivated reasoning.

The final limitation that the second experiment was designed to address was the failure of the social, state self-esteem measure to perform as expected. The main problem with the self-esteem measure was the close correlation with party identification. Rather than accurately measuring the self-esteem of the participant in that moment (i.e., state self-esteem), it instead may have served as a way for participants to reinforce their sense of group belonging, thus rendering this measure useless as a measure of **state** self-esteem. As such, new measures of self-esteem were tested in the second experiment.

More formally, the second experiment was designed to test affirmatory messaging in a) a situation where strong attitudes already existed and b) both a partisan and non-partisan political context. As such, the hypotheses remain largely the same as the first experiment, with the exception of outgroup derogation due to the lack of significant differences in the first experiment. Additionally, the second experiment is *only* interested in what happens in the specific case of exposure to counter-attitudinal information. As such, the hypotheses reflect this.

H1: Participants in the affirmatory message condition will report lower attitude polarization scores than participants in the non-affirmatory message condition.

H2: Participants in affirmatory message condition will generate fewer counter-arguments than participants in the non-affirmatory message condition.

H3: Participants in the affirmatory message condition will report more positive evaluations of source credibility than participants in the non-affirmatory message condition.

H4: Participants in the affirmatory message condition will report greater policy support than participants in the non-affirmatory message condition.

H5: Participants in the affirmatory message condition will report higher state self-esteem scores than participants in the non-affirmatory message condition.

Additionally, as discussed previously, this experiment is interested in the effect of group membership plus strong attitudes as opposed to just strong attitudes. In this case, the group membership under investigation is partisanship. To the extent that group membership does not matter, there should be no difference in the levels of directionally motivated reasoning outcomes among participants in the partisan and non-partisan groups exposed to the non-affirmatory advertisement. However, there is no clear indication that group attacks leads to stronger processing outcomes as opposed to individual attitude attacks. As such, this leads to the first research question:

RQ1: Are there differences in directionally motivated reasoning outcomes between the partisan and non-partisan issue groups?

The rest of this chapter details the necessary pilot tests for the second experiment while the fifth chapter deals exclusively with the main second experiment.

Pilot Test One: Choosing Issues

The second experiment was designed to examine an issue where individuals had strong attitudes clearly tied to partisan identity (i.e. attitudes shared by the group) and an issue where individuals had strong attitudes that were not clearly tied to partisan identity (i.e. attitudes not shared by the group). In order to choose an issue with sufficient attitude strength (and to examine the relationship with partisanship), a pilot test designed to

measure issue attitudes was employed. This pilot test was designed to examine attitudes toward fourteen public policy issues (see Table 5 for a complete list of the policy issues). Eight were considered to be non-partisan in nature and six were considered to have clear partisan positions (marked in Table 5).

Participants and procedure. Using MTurk, 200 participants completed the first pilot. Participants were asked to take a short survey on their policy attitudes and were paid \$0.50 for their participation. Next, participants were asked about their policy attitudes toward fourteen public policy issues as well as questions designed to measure certainty. The resulting sample was 61.5% male (38.5% female) with a median education level of a bachelor's degree. The sample had a mean age of 35.14, a median income of \$25,000-\$49,999 and was 73% white (8% black, 14.5% Asian, 2.5% Native American, and 9% Hispanic). Politically, the sample was 55% Democrat, continuing the slight oversample of Democrats.

Pre-test one questionnaire. In order to determine attitudes, the questionnaire needed to measure both attitude position and attitude strength (full questionnaire can be found in Appendix F). Additionally, given the issues with the measurement of the self-esteem variable in the last experiment, new self-esteem scales were piloted.

Attitude strength and position. To measure attitude position, participants were presented with two opposing policy viewpoints and were asked to choose which policy solution was closer to their attitude. To measure strength, participants were asked to rate on a 5 point scale (ranging from not at all to extremely) how strong their feelings were on the issue, how certain they were of their feelings on the issue and how important the issue

was to them personally. Question wording for all fourteen policy issues can be found in

Table 5.

Table 5
Wording of Issues Tested for Experiment Two

Issue	Question Wording
Defense spending	Some people believe that we should spend less money for defense. Others feel that defense spending should be greatly increased. Which viewpoint is closer to your opinion?
Urban Unrest	There is much discussion about the best way to deal with urban unrest and rioting. Some say it is more important to use all available force to maintain law and order. Others say it is more important to correct the problems of poverty and unemployment that give rise to these disturbances. Which option is closer to your opinion?
Hate Speech	Recently there has been a lot of discussion about hate speech. Hate speech is defined as "speech that attacks, threatens or insults a person or a group on the basis of national origin, ethnicity, color, religion, gender, gender identity, sexual orientation or disability." Some people believe that hate speech is not considered protected speech under the First Amendment and that those who engage in hate speech should be prosecuted. Others feel that hate speech, while unpleasant, must be protected because of free speech laws. Which view is close to your opinion?
Marijuana	Some people believe that marijuana should be legalized, similarly to alcohol. Others believe that marijuana serves as a "gateway drug" and should not be legalized. Which is closer to your opinion?
Privacy Issues	As part of its efforts to investigate terrorism, a federal government agency obtained records from larger US telephone and Internet companies in order to compile telephone call logs and Internet communications. Some people believe that this program should be continued and expanded, while others believe that this program should be discontinued and disbanded. Which is closer to your opinion?
Fracking	Do you support or oppose the increased use of fracking to extract oil and natural gas from underground rock formations?

Information Security	Recently, there has been a lot of talk about the security of personal information. Some people believe that the government should do more to regulate what advertisers do with consumers' personal information, while other people believe that the government should not get involved in this issue. Which is closer to your opinion?
Euthanasia	When a person has a disease that cannot be cured, do you think doctors should be allowed by law to end the patient's life by some painless means if the patient and his or her family request it?
Social Security	Assuming there would be no change in Social Security benefits for those who are currently 55 or older, do you think it is a good idea or bad idea to address concerns with the Social Security system by increasing the age at which people are eligible to receive Social Security benefits?
Gun Control	Some people believe that it is more important to be able to control gun ownership while other people believe that is more important to protect the right of Americans to own guns. Which is closer to your opinion?
Immigration	If you had to choose, what should be the main focus of the U.S. government in dealing with the issue of illegal immigration: developing a plan for halting the flow of illegal immigrants into the U.S. or developing a plan to deal with immigrants who are currently in the U.S. illegally?
Abortion	Some people believe that abortion should be legal in most circumstances while others believe that abortion should be illegal in most cases. Which is closer to your opinion?
Minimum Wage	Would you support a bill that would raise the federal minimum wage to \$9 an hour?
Environment	Would you favor or oppose a bill that would set higher emissions and pollution standards for business and industry?

Self-Esteem. Two new self-esteem measures were piloted. The reliability of each self-esteem measure was examined as well as the correlation between the two self-esteem measures. The first self-esteem measure was designed to measure participant's self-

esteem as a function of their group membership in a political party and was adapted from a scale by Ellemers, Kortekaas, and Ouwerkerk (1999). Participants were asked to indicate how much they agreed or disagreed (on a 6-point scale) with four group self-esteem statements. These statements included: “I believe my political party has little to be proud of,” “I feel good about my political party,” “I have little respect for my political party,” and “I would rather not tell that I belong to this political party.” The third and fourth questions were reverse-coded. The four questions had good reliability ($\alpha = .833$) and were combined to create one self-esteem index.

However, due to concerns that tapping directly into the group self-esteem concept would lead to the same problems as the first experiment, a second, more distant, measure of state self-esteem was piloted (Heatherton & Polivy, 1999). Overall, the main concern with the group-based self-esteem measures is that these measures are measuring *trait* self-esteem rather than *state* self-esteem. However, Rubin and Hewstone (1998) highlight that social, state self-esteem is what underlies this group esteem. The self-esteem scale piloted here by Heatherton and Polivy (1999) consisted of three sub-scales that make up an overall larger scale (full question wording can be seen in the attached questionnaire in Appendix F). Each sub-scale was considered reliable (Performance $\alpha = .84$; Social subcomponent $\alpha = .90$; Appearance subcomponent $\alpha = .83$) and the overall state self-esteem scale was reliable as well ($\alpha = .93$). The social sub-scale is of particular interest to this dissertation.

Pilot test one results. This pilot test was conducted to identify two public policy issues that would serve as the issue stimuli in the main experiment. One issue needed to

be identified that was strongly related to party identification (i.e. Republicans and Democrats take clear and opposing positions) while the other issue needed to be unrelated to party identification yet still contain opposing opinions. Table 6 shows percentage support/oppose and mean attitude strength scores for each issue. Table 7 shows reliability scores for the attitude strength measures for each issue.

To qualify as a good candidate for the non-partisan issue, an issue needed to have roughly equal amounts of people on both sides of the issue as well as no clear partisan alignment. Table 8 shows the partisan distributions as well as chi-square results for each issue position. Of the fourteen issues, only three had non-significant chi-squares, suggesting no clear partisan differences: hate speech, privacy issues and social security. Social security policy was the best match with a non-partisan issue. Overall, 53.5% of participants were in favor of raising the retirement age while 46.5% were opposed. Additionally, there were no significant differences in attitude position among Democrats, Republicans and Independents ($\chi^2 = .99, p = .61$). Finally, social security had attitudes of relatively equal strength on both sides of the issue (mean attitude toward raising retirement age = 3.18, mean attitude against raising the retirement age = 3.72). Overall, social security fit the criteria of non-partisan issue the best.

Table 6

Experiment Two, Pilot One: Attitude Strength Scores

Issue	Percent	Mean Attitude Strength Score
Defense Spending		
Defense spending should be decreased	77.5	3.46
Defense spending should be increased	22.5	3.26
Urban unrest		

Use all available force	20.6	3.60
Solve problems of poverty/unemployment	79.4	3.67
Hate speech		
Hate speech should be protected	63.0	3.52
Hate speech should be prosecuted	37.0	3.41
Marijuana legalization		
Marijuana should be legalized	80.0	3.81
Marijuana should remain illegal	19.6	3.49
Privacy issues		
Call logging should be continued	30.0	3.28
Call logging should be disbanded	70.0	3.99
Fracking		
Support increased fracking	25.5	3.19
Oppose increased fracking	74.5	3.57
Information security		
Government should regulate use of personal information	70.0	3.81
Government should not get involved	30.0	3.46
Euthanasia		
Allow	86.0	3.75
Not allow	14.0	3.57
Social security		
Raise retirement age	53.5	3.18
Do not raise retirement age	46.5	3.72
Gun rights		
Control ownership	59.8	3.85
Protect right to own guns	40.2	4.03
Immigration		
Develop plan to halt illegal immigration	43.2	3.68
Develop plan to deal with current illegal immigrants	56.8	3.45
Abortion		
Should be legal	74.5	3.96
Should be illegal	25.5	3.82
Minimum Wage		
Raise minimum wage	79.9	4.00
Do not raise minimum wage	20.1	3.33
Environment		
Favor bill to set higher emissions standards	80.4	3.97
Oppose bill to set higher emissions standards	19.6	3.39

Note. Attitude strength scales run from 1-5, with one indicating weak attitudes and five indicating strong attitudes.

Table 7

Experiment Two, Pilot One: Reliability of Attitude Strength Indicators by Issue

Issue	Reliability of Strength Indicators (Cronbach's Alpha)
Defense spending	.82
Urban unrest	.85
Hate speech	.85
Marijuana Legalization	.84
Privacy Issues	.91
Fracking	.91
Information Security	.91
Euthanasia	.88
Social Security	.86
Gun Rights	.88
Immigration	.86
Abortion	.82
Minimum Wage	.87
Environment	.91

Table 8

Experiment Two, Pilot One: Distribution of Issue Attitudes by Political Party Identification

Issue	Percent Democrat	Percent Republican	Percent Independent	X^2
Defense Spending				
Defense spending should be decreased	64.4	45.7	86.5	32.85***
Defense spending should be increased	33.3	54.3	13.5	
Urban unrest				
Use all available force	10.0	45.7	78.4	25.41***
Solve problems of poverty/unemployment	90.0	54.3	19.0	

Hate speech				
Hate speech should be protected	55.9	73.9	70.3	5.61 ⁺
Hate speech should be prosecuted	44.1	26.1	29.7	
Marijuana legalization				
Marijuana should be legalized	85.5	65.2	83.8	8.10*
Marijuana should remain illegal	14.5	34.8	16.2	
Privacy issues				
Call logging should be continued	29.7	32.6	32.4	.18
Call logging should be disbanded	70.3	67.4	67.6	
Fracking				
Support increased fracking	16.2	50.0	21.6	19.98***
Oppose increased fracking	83.8	50.0	78.4	
Information security				
Government should regulate use of personal information	83.8	47.8	64.9	21.74***
Government should not get involved	16.2	52.2	35.1	
Euthanasia				
Allow	93.7	67.4	89.2	19.65***
Not allow	6.3	32.6	10.8	
Social security				
Raise retirement age	51.4	58.7	48.6	.99
Do not raise retirement age	48.6	41.3	51.4	
Gun rights				
Control ownership	78.2	28.3	45.9	37.54***
Protect right to own guns	21.8	71.7	54.1	

Immigration				
Develop plan to halt illegal immigration	31.8	65.2	48.6	15.34***
Develop plan to deal with current illegal immigrants	68.2	34.8	51.4	
Abortion				
Should be legal	86.5	50	73	23.38***
Should be illegal	13.5	50	27	
Minimum Wage				
Raise minimum wage	91.8	58.7	75.7	23.75***
Do not raise minimum wage	8.2	41.3	24.3	
Environment				
Favor bill to set higher emissions standards	88.3	60	81.1	16.22***
Oppose bill to set higher emissions standards	11.7	40	18.9	

Note. * $p < .05$; *** $p < .001$

The second issue chosen was a partisan issue. To be chosen, an issue had to have significant partisan differences in issue position and attitudes of relatively equal strength on both sides of the issue. Though many issues had significant chi-squares (indicating difference), only two issues had clear partisan groupings on either side of the issue. These issues were gun rights and immigration (see Table 8 for percentages by party). Both issues had attitudes of relatively equal strength on both sides of the issue (see Table 6) but the attitudes toward gun rights were slightly stronger. This provides a harder test of the affirmatory messaging hypothesis. Additionally, immigration was not chosen as an issue due to concerns that outgroup anxiety related to immigrants may exert a confounding influence (Brader, Valentino, & Suhay, 2008).

Turning to the self-esteem results, the relationship of both self-esteem scales to strength of party identification were examined. A variable measuring strength of party identification was created by folding the party identification scale (ranging from strong Republican to strong Democrat) in half, resulting in a four-point scale ranging from not strong partisan to strong partisan ($M = 2.71$, $SD = 1.07$). The first self-esteem measure (the group self-esteem measure asking about political party membership) was moderately correlated with strength of party identification ($r = .45$, $p < .01$). This is not surprising, given this scale essentially measures satisfaction with party membership. It is reasonable to assume that stronger partisans would be more satisfied with their party membership. However, this correlation presents the same problem as the measure of self-esteem from the first experiment. It may be too closely tied to an evaluation of party membership, rather than actually measuring temporary self-esteem changes. This is problematic because it could be used as tool for engaging in directionally motivated reasoning.

The second self-esteem scale measured state self-esteem but removed specific reference to any group membership. As expected, there was no correlation between any of the three self-esteem subcomponents and strength of party identification (Performance: $r = .05$, $p > .05$; Social: $r = .08$, $p > .05$; Appearance: $r = .01$, $p > .05$).

Given the above findings, the decision was made to only include the second, more distant measure of state self-esteem in the final experiment. This was done for two reasons. First, the significant correlation between partisan strength and the group self-esteem questions is problematic. The motivated reasoning mechanism hypothesis rests on the belief that self-esteem takes a hit when one's group is threatened. However, to the

extent that participants simply view these questions as another form of measuring strength of party identification, they may actually be used to bolster group-based self-esteem, rather than accurately measuring group-based self-esteem differences.

Second, in order to accurately measure any self-esteem changes, self-esteem must be measured immediately following exposure to the stimuli. However, the premise of the second experiment is to have one issue that is less partisan in nature. The concern in using the group self-esteem scale is that asking participants to evaluate their political party membership would prime partisanship, which would be problematic in the non-partisan issue conditions. As such, only the second, more distant measure of state self-esteem was adopted for the final experiment.

Pilot Testing the Stimuli

In order to test the previously stated hypotheses and research question, original direct mail pieces were created. Three pilot tests were necessary to create effective stimuli. This section details those pilot tests.

Stimuli pilot test one. For the first stimuli pilot test, eight direct mail pieces were constructed. Each direct mail piece contained either no affirmatory messaging or affirmatory messaging. The advertisements were sponsored by the same fictitious politician, Greg Ellison, and contained information either supporting or opposing a proposed bill in Congress (to either establish universal background checks for firearm purchases or to raise the social security retirement age). The front side of each advertisement for each subject was the same and asked generic questions about each issue (i.e. social security or gun rights). The only difference was the language on the

bottom of the front, where Greg Ellison was listed as either supporting or opposing the proposal under consideration.

The back side of each advertisement contained four arguments arranged in the same format. In the non-affirmatory condition, the back side contained four arguments all supporting or opposing the proposed policy. In the affirmatory condition, the first two arguments were always against what the politician actually believed (i.e., if the politician opposed the policy, the first two arguments would be arguments in support of the policy). These were then followed by arguments in line with what the politician was advocating (see Appendix G for exact layout). In total, eight advertisements were constructed (Gun rights: opposed, non-affirmatory; opposed, affirmatory; supported, non-affirmatory; supported, affirmatory; Social security: opposed, non-affirmatory; opposed, affirmatory; supported, non-affirmatory; supported, affirmatory).

Participants. 426 people participated in the first pilot (approximately 50 participants evaluated each of the eight advertisements). Participants were recruited through MTurk and were paid \$0.25 in exchange for their participation in the pilot. Participants viewed one of the eight advertisements and then answered a short series of questions designed to test their comprehension of the advertisements.

Questionnaire. For affirmatory advertising to work, participants must first notice and register the structure and originality of the political advertisement. As such, participants were asked a comprehension question where they had to identify the structure of the argument (this ad contained only statements supporting [policy]; this ad contained only statements opposing [policy]; this ad contained statements both

supporting and opposing [policy]). Additionally, participants were given a three item expectancy disconfirmation scale. This asked participants to rate (using a six point, fully labeled semantic-differential scale) “how surprising/unsurprising was the ad,” “how expected or unexpected was the ad,” and “how similar or dissimilar was the ad compared to other political advertisements” (see Appendix H for complete question wording).

Results. The results of the first pilot indicated that there were possibly some issues in comprehension. While the non-affirmatory ads performed relatively well (most participants were able to correctly identify that the ad contained all supporting or opposing arguments), the affirmatory ads performed less well, with correctness ranging from a high of 80.8% to a low of 59.2% (see Table 9). However, the expectancy disconfirmation measure did show significant differences between the affirmatory and non-affirmatory conditions (Non-affirmatory: $M = 2.98$, $SD = 1.02$; Affirmatory: $M = 3.57$, $SD = 1.09$; $t = -5.59$, $p = .00$), with the affirmatory condition showing greater expectancy disconfirmation (indicating that participants were more surprised by the ads, the ads were more unexpected and the ads were more dissimilar to normal political advertising). However, despite the positive findings for expectancy disconfirmation, concerns about the comprehension issues remain.

Table 9

Experiment Two, Stimuli Pilot One Results

Condition	Percent Correct	Percent Incorrect
Social security, pro, non-affirmatory	90.2	9.8
Social security, pro, affirmatory	74	26

Social security, con, non-affirmatory	92.2	7.8
Social security, con, affirmatory	80.8	19.2
Gun control, pro, non-affirmatory	95.9	4.1
Gun control, pro, affirmatory	70.8	29.2
Gun control, con, non-affirmatory	82	18
Gun control, con, affirmatory	59.2	40.8

In analyzing the pilot data, two possible explanations for this confusion emerged. The first possible explanation has to do with the wording of the manipulation check itself. Participants were asked “which of the following do you believe is the best description of the information in the ad you just viewed?” and had to choose from four options (only arguments supporting [policy], only arguments opposing [policy], arguments both supporting and opposing [policy], or none of these are a good description). It is possible that the wording of this question was interpreted by participants as asking which position the politician was advocating. A second possible explanation for the low percentages involves the stimuli itself. Each advertisement clearly states the politician’s position on the front of the advertisement. It is possible that people see this easy heuristic and do not carefully read the content of the back of the advertisement. As such, two additional pilot tests were conducted to test each of these potential explanations. The method and questionnaire for each pilot test will be described in turn, followed by a comparative analysis of the results of all three pilot tests.

Stimuli Pilot Test 2. The second stimuli pilot test was designed to test the explanation that the wording of the manipulation check was misinterpreted by participants. As such, this pilot test was conducted using only the affirmatory advertisements, and changed the wording of the manipulation check question.

Participants. 215 participants completed the second pilot test (approximately 50 participants viewed each of the four affirmatory advertisements). Participants were recruited via MTurk and were paid \$0.25 in exchange for their participation. Each participant was asked to view one of four affirmatory advertisements and then asked a short series of questions about the advertisements.

Questionnaire. Participants were asked the same questions about expectancy disconfirmation as the first pilot test (see Appendix H). The only significant questionnaire difference in this pilot was the wording change of the manipulation check question. The new question asked participants “which of the following do you believe is the best description of the information in the ad you just viewed?” and the four response options included: this advertisement presented **only** arguments in favor of [policy], this advertisement presented **only** arguments in opposition to [policy], this advertisement presented **both** arguments in favor of and in opposition to [policy], none of these are a good description.

Stimuli pilot test three. The third pilot test was designed to test the explanation that stated policy positions on the front of the advertisement were serving as a heuristic for participants, thus causing them to examine the arguments on the back of the stimuli less closely. As such, for this pilot test, the stated policy position was removed from the

front of the affirmatory advertisements (see Appendix I). Each of the four affirmatory advertisements was tested again in this pilot test.

Participants. 220 individuals participated in the third pilot test (approximately 50 participants viewed each of the four affirmatory advertisements). Participants were recruited from MTurk and were paid \$0.25 in exchange for their participation. Each participant viewed one of the four affirmatory advertisements and then answered a short series of questions designed to measure comprehension and expectancy disconfirmation.

Questionnaire. Participants were asked the exact same comprehension question as the first pilot, where they had to identify the structure of the argument (this ad contained only statements supporting [policy]; this ad contained only statements opposing [policy]; this ad contained statements both supporting and opposing [policy]). Additionally, they were asked the same expectancy disconfirmation questions.

Results: Pilots two and three. The results of the second and third pilot are more meaningful when viewed in tandem and in comparison to the first pilot. Table 10 details the results of the comprehension question of all three pilot tests in comparison to one another. As can be seen from Table 10, changing the wording of the manipulation check improves the percentage of participants who correctly identified the structure of the argument. However, changing the stimuli wording had little added benefit on top of changing the manipulation check wording. As such, the original stimuli were retained for the final experiment and the new wording of the manipulation check was adopted, largely because an advertisement with no stated policy position (i.e. the third pilot) seemed fairly unrealistic.

Table 10

Experiment Two, Stimuli Pilots 1-3: Comprehension Comparison

Condition	Pilot 1 (original)		Pilot 2 (change question wording)		Pilot 3 (change question wording and stimuli)	
	Percent Correct	Percent Incorrect	Percent Correct	Percent Incorrect	Percent Correct	Percent Incorrect
Social security, pro, affirmatory	74.0	26.0	78.4	21.6	80.8	19.2
Social security, con, affirmatory	80.8	19.2	84.6	15.4*	86.5	13.5
Gun control, pro, affirmatory	70.8	29.2	74.5	25.5*	75.5	24.5*
Gun control, con, affirmatory	59.2	40.8	78	22*	67.3	32.7

Note. *Indicates a slight preference for one of the wrong answers.

Chapter V: Experiment Two

As outlined in chapter four, the second experiment was designed to address some of the limitations and unanswered questions raised by the first experiment. First, this experiment was designed to test the effect of affirmatory advertising in a context where strong attitudes already exist. This is a much harder test of the affirmatory messaging hypotheses. Additionally, this experiment examines the unique role that group identity may add to the directionally motivated reasoning process. The failure of the group self-esteem measures to perform as expected raise questions about the nature of the underlying assumed mechanism. It is possible that the challenge to group self-esteem does not uniquely intensify directionally motivated reasoning outcomes. This leads to the final goal of this experiment- testing an individual social state self-esteem measure as opposed to a group identity measure of self-esteem. The hypotheses and research question are re-stated briefly below.

H1: Participants in the affirmatory message condition will report lower attitude polarization scores than participants in the non-affirmatory message condition.

H2: Participants in the affirmatory message condition will generate fewer counter-arguments than participants in the non-affirmatory message condition.

H3: Participants in the affirmatory message condition will report more positive evaluations of source credibility than participants in the non-affirmatory message condition.

H4: Participants in the affirmatory message condition will report greater policy support than participants in the non-affirmatory message condition.

H5: Participants in the affirmatory message condition will report higher state self-esteem scores than participants in the non-affirmatory message condition.

RQ1: Are there differences in directionally motivated reasoning outcomes between the partisan and non-partisan issue groups?

The two main independent variables under consideration in the second experiment are affirmation (i.e. non-affirmatory advertisement versus affirmatory advertisement) and partisan versus non-partisan issue (i.e. strong attitudes shared by the group versus strong attitudes where no clear group attitude exists). This resulted in a 2 x 2 experimental design crossing affirmation with type of issue. All participants were exposed to an advertisement that went against their previously stated attitudes, as this study was solely concerned with the effects of counter-attitudinal information. This experiment used a pre-test/post-test design.

Pre-test Method

The pre-test was designed to assess pre-stimuli attitudes, pre-stimuli self-esteem, party identification and other demographic information. Participants were re-contacted five days after the initial pre-test.

Pre-test participants. Participants for this experiment were recruited through Amazon Mechanical Turk. 496 people participated in the pre-test. The resulting sample was 51.4% male with a median education level of a bachelor's degree (35.7%) and a mean age of 35.2. The sample was 79.6% Caucasian, 7.5% African-American, 7.5% Asian, 6.3% Hispanic and 2% Native American.

Pre-test questionnaire. The pre-test questionnaire was designed to assess pre-stimuli attitudes toward both issues for the purposes of identifying individuals with strong prior attitudes (see Appendix J for complete questionnaire). Additionally, the questionnaire measured party affiliation and other demographic variables.

Attitude strength. Attitude strength was measured using a 15-item scale. Initial attitudes toward each issue (social security or gun rights) was measured using a forced choice question. Participants had to choose whether they favored or opposed the proposed legislation (i.e. raising the retirement age or requiring universal background checks). Attitude strength was measured using a 15-item scale (Petty & Krosnick, 1995). This scale consists of three sub-scales which measure certainty, importance and intensity. Each response is measured on a five point scale ranging from “not at all” to “extremely.” Six questions were used to measure certainty and asked participants how certain they were of their feelings, how sure they were that their opinions were correct, how firm their opinions were, how easily could their opinions be changed, how definite were their views and how convinced were they on their issue stance. Five questions were used to measure importance and asked participants how important the issue was to them personally, how much they personally cared about the issue, how important a candidate’s position would be, how much the issue means to them and how important was the issue compared to other issues. Four questions measured intensity and asked participants how strongly they felt about the issue, how strong their feelings were compared to their feelings on other public issues, how strong their feelings were compared to other people’s feelings on the

issue and how intense were their attitudes. Each subscale had a high degree of reliability as did the overall attitude strength scale (see Table 11).

Table 11

Experiment Two: Attitude Strength Reliability Pre/Post Test

Issue	Pre-Test Reliability	Post-Test Reliability
Gun Rights, Certainty	.93	.95
Gun Rights, Importance	.86	.92
Gun Rights, Intensity	.88	.93
Gun Rights, Overall Strength	.89	.95
Social Security, Certainty	.89	.94
Social Security, Importance	.90	.94
Social Security, Intensity	.91	.93
Social Security, Overall Strength	.93	.96

Party identification. Party identification was measured using the standard branching scale from the ANES. Independents who reported that they identified more with one of the parties were classified as leaners. The resulting sample was 57.3% Democrats, 22.0% Republicans and 16.3% Independents.

Pre-test: Choosing Participants for the Full Experiment

In order to be chosen for the full experiment, participants had to both identify with a political party and have a strong attitude toward one of the two issues (gun rights or social security). To determine overall attitude strength, all fifteen indicators were combined into one overall scale of attitude strength by summing together all fifteen indicators and dividing by fifteen. This returns the overall scale to the 5-point response scale, with higher values indicating stronger attitudes. The mean attitude strength score among those who identified with a political party (i.e. excluding Independents) was 3.40

for universal background checks and 3.33 for raising the retirement age. As such, participants with overall scores of 3.5 or higher were chosen to participate in the full experiment, as their attitudes are stronger than the average. 41.2% of the sample (N = 162) had stronger than average attitudes toward raising the retirement age. 44.5% of the sample (N = 175) had stronger than average attitudes toward universal background checks. Of these numbers, some participants had strong attitudes toward both issues. These participants were subsequently removed from both lists and then randomly assigned to either social security or gun rights as an issue.

Next, for each issue, the directional opinion of each participant (favor or oppose) was ascertained and participants were randomly assigned to be either in an affirmatory or non-affirmatory condition (using a random number generator). In the end, 245 participants were re-contacted to participate in the full experiment.

Experiment Two Method

Procedure. Participants for this experiment were contacted through Amazon Mechanical Turk. Workers who were chosen for participation in the full experiment were given a unique qualification that corresponded to their specific survey (i.e. specific issue, position and sidedness). Upon entering the survey, participants were asked to consent to participation in this study and were given a list of the risks (none) and benefits (compensation) of participating in the study. Participants were asked to view a direct mail piece for a fictitious candidate, Greg Ellison (stimuli described previously in chapter four). Participants were told that this candidate was thinking about running in their state in the next five years but that identifying information had been changed for the purposes

of research. Participants were required to stay on the page for at least 10 seconds before moving on. After viewing the advertisements, participants were asked to fill out a questionnaire that included measures of self-esteem, attitude polarization, counter-arguing, outgroup derogation, source credibility (described in detail below). Finally, participants were debriefed and provided with a completion code that they could use to receive compensation for their participation.

Participants. 164 participants completed both the pre-test and the second follow-up experiment. However, participants who failed to correctly identify the structure of the argument ($N = 36$) were excluded from the final analysis. As was prophesized by the stimuli pilots, there were more participants in the affirmatory conditions who failed to correctly identify the argument structure. The resulting sample of 128 individuals were 53.1% female with an average age of 38.89, a median income of \$25,000-\$49,999 and \$50,000-\$74,999 (equal tie) and a median education level of a bachelor's degree. Participants identified as 89.8% Caucasian, 4.7% Hispanic, 1.6% Native American, and 3.9% Asian and African-American, respectively. The sample was composed of 68.8% Democrats and 31.3% Republicans. The mean ideology score was 3.27, indicating a slightly liberal slant to the participants. Overall, these party identification percentages are in line with previous findings regarding Mechanical Turk samples.

Questionnaire. The questionnaire was designed to assess and measure directionally motivated processing outcomes and mechanisms.

Self-esteem. Self-esteem was measured using Heatherington and Polivy's (1991) fifteen item scale. Each of the three subscales (performance, social and appearance) had a

high degree of reliability (Performance $\alpha = .86$; Social $\alpha = .91$; Appearance $\alpha = .86$) and the overall scale was reliable ($\alpha = .93$). Self-esteem was measured immediately following exposure to the stimuli.

Counter-arguing. Counter-arguing was measured by utilizing the same thought-listing task as the first experiment (Petty & Caccioppo, 1986). The median number of thoughts reported was four. The median number of negative thoughts reported was two and the median number of positive thoughts reported was two. To determine counter-arguing, the proportion of negative thoughts was calculated for each respondent ($M = .57$, $SD = .39$) by dividing the total number of negative thoughts by the total number of thoughts.

Manipulation Check. A manipulation check was employed where participants were asked to identify the structure of the argument in the advertisement. To check for argument comprehension, participants were asked “which of the following do you believe is the best description of the information in the ad you just viewed?” Response options included this advertisement presented: only arguments in favor of [issue], only arguments in opposition to [issue], both arguments in favor of and in opposition to [issue] and none of the above. Of the 164 total participants, 36 participants failed the manipulation check and were subsequently excluded from the analysis.

Source credibility. Source credibility was measured using McCroskey and Teven’s (1998) three-part scale consisting of character, competence and goodwill. Each subscale had good reliability (Character $\alpha = .94$; Competence $\alpha = .94$; Goodwill $\alpha = .93$) and the overall source credibility scale was also reliable ($\alpha = .97$).

Attitude polarization. Attitude polarization was measured using the same battery of attitude strength questions (Petty & Krosnick, 1995) as the pre-test ($M = 3.92$, $SD = .72$). Polarization scores were calculated by subtracting post-test scores from pre-test scores. The resulting scale has the potential to run from -5 (indicating a participant who went from a very weak attitude to a very strong attitude) to 5 (indicating a participant who went from a very strong attitude to a very weak attitude). In reality, the scores of the sample ranged from -1.47 to 2.40. As such, negative scores up through zero indicate greater polarization while positive scores indicate less polarization. The average polarization score across the whole sample was .11 ($SD = .61$)

Behavioral indicators. In an attempt to get at more behavioral aspects of these advertisements, additional behavioral measures were included in the questionnaire for Experiment 2. First, participants were asked how likely they would be to vote for Greg Ellison (5-point scale ranging for “not at all likely” to “extremely likely”) and how likely they would be to participate in a political event other than voting for Greg Ellison (5-point scale ranging from “not at all likely” to “extremely likely”). Overall, participants had very low participation intentions (Vote likelihood: $M = 1.53$, $SD = .89$; Participation likelihood: $M = 1.60$, $SD = 1.05$).

Additionally, participants were asked whether they would like to participate in a variety of behaviors related to the issue proposal including willingness to sign a petition (53.1% yes), desire to receive more information about the issue (41.4% yes), receiving a monthly newsletter about the issue (15.6% yes) and donating a portion of their payment to support the issue (10.2% yes).

Results

To examine hypotheses one through four, paired samples t-tests and independent samples t-tests were used. Participants were categorized into two groups based on whether they were exposed to the non-affirmatory or affirmatory message. The first hypothesis posited that participants exposed to affirmatory messaging would show less attitude polarization compared to those who were exposed to non-affirmatory messaging. Decreased attitude polarization exists to the extent that the participants in the affirmatory condition report less strong attitudes than their pre-test attitudes. As such, paired samples t-tests were run individually for those in the non-affirmatory condition and those in the affirmatory condition. The results show that those in the non-affirmatory condition had significantly weaker attitudes in the post-test than in the pre-test (Pre-test: $M = 4.12$, $SD = .44$; Post-test: $M = 3.91$, $SD = .79$; $t(76) = 2.64$, $p = .01$). However, the same pattern of results does not hold for participants in the affirmatory condition (Pre-test: $M = 4.01$, $SD = .39$; Post-test: $M = 3.94$, $SD = .60$). These results are opposite of what was hypothesized (i.e. the significant drop in attitude strength was predicted for the affirmatory condition). As such, the first hypothesis was not supported.

The second hypothesis posited that participants in the affirmatory condition would show less counter-arguing than participants in the non-affirmatory condition. Counter-arguing was measured by dividing the total number of negative thoughts by the total number of thoughts. Overall, the results show no significant differences between the two groups (Non-affirmatory: $M = .56$, $SD = .39$; Affirmatory: $M = .58$, $SD = .39$; $t(125) = -.21$, $p = .84$). As such, the second hypothesis is not supported.

The third hypothesis postulated that participants in the affirmatory condition would have more positive perceptions of source credibility of the sponsoring politician compared to those in the non-affirmatory condition. The results show differences that are significant at the .10 level and in the expected direction (Non-affirmatory: $M = 3.01$, $SD = 1.38$; Affirmatory: $M = 3.49$, $SD = 1.37$; $t(126) = -1.93$, $p = .06$). If the source credibility scale is broken down into its three subcomponents (character, competence and goodwill), it becomes obvious that the differences in overall source credibility are largely driven by perception of competence, with a little bit of contribution from perceptions of goodwill. There are no significant differences in perceptions of character (Non-affirmatory: $M = 3.25$, $SD = 1.45$; Affirmatory: $M = 3.54$, $SD = 1.46$; $t(126) = -1.10$, $p = .28$) but there are significant differences in perception of competence (Non-affirmatory: $M = 3.37$, $SD = 1.52$; Affirmatory: $M = 4.03$, $SD = 1.50$; $t(126) = -2.40$, $p = .02$) and marginally significant differences in perceptions of goodwill (Non-affirmatory: $M = 2.42$, $SD = 1.44$; Affirmatory: $M = 2.92$, $SD = 1.44$; $t(126) = -1.92$, $p = .06$). As such, there is partial support for the third hypothesis.

The fourth hypothesis posited that participants in the affirmatory advertisement condition would be more likely to intend to participate in voting and non-voting behaviors on behalf of the out-party candidate than participants in the non-affirmatory condition. The first behavioral indicator is vote intention for the sponsoring politician. The results show no significant differences (Non-affirmatory: $M = 1.44$, $SD = .77$; Affirmatory: $M = 1.66$, $SD = 1.04$; $t(125)$, $p = .18$). The second behavioral indicator is participation (non-voting activities) intention on behalf of the sponsoring politician.

Again, the results show no significant differences (Non-affirmatory: $M = 1.57$, $SD = 1.05$; Affirmatory: $M = 1.65$, $SD = 1.06$; $t(125) = -.43$, $p = .67$).

The rest of the behavioral indicators do not measure a direction but rather an intention to participate generally. These behavioral indicators are dichotomous in nature. As such, chi-squares were used to determine whether message sidedness influenced the likelihood of engaging in any of these behaviors. The first behavior question asked participants if they would be willing to sign a petition related to the issue under discussion, which yielded no significant differences ($X^2(1, N = 164) = .03$, $p = .87$). The second behavior question asked participants if they wanted to receive more information about this issue, which also yielded no significant differences ($X^2(1, N = 164) = .00$, $p = .99$). The third behavior question asked if participants would be willing to donate part of their earnings to a non-profit that deals with this issue specifically. No significant differences were found between groups ($X^2(1, N = 164) = 1.21$, $p = .27$). The final behavior question asked participants if they would like to receive a newsletter related to this issue. Participants in the affirmatory condition were somewhat more likely to say that they would like to receive a monthly newsletter specifically dealing with the topic ($X^2(1, N = 164) = 2.61$, $p = .11$). However, these results taken together provide little support for the fourth hypothesis.

The fifth hypothesis posited that participants exposed to an affirmatory message would report higher self-esteem scores than participants exposed to non-affirmatory message. The results suggest that significant differences exist between the two groups at the .10 level, with means trending in the expected direction (Non-affirmatory: $M = 3.67$,

$SD = .71$; Affirmatory: $M = 3.89$, $SD = .71$; $t(126) = -1.68$, $p = .095$). It appears that these results are driven most strongly by the social and appearance based self-esteem subscales. The two groups show differences at the .10 level on appearance state self-esteem (Non-affirmatory: $M = 3.02$, $SD = .93$; Affirmatory: $M = 3.30$, $SD = .83$; $t(126) = -1.80$, $p = .075$) as well as social state self-esteem (Non-affirmatory: $M = 3.71$, $SD = .97$; Affirmatory: $M = 4.02$, $SD = .85$; $t(126) = -1.90$, $p = .06$).

To further examine the role that state self-esteem might play, the pre-test and post-test self-esteem scores were compared. There were no significant differences in the overall self-esteem scale. Both the affirmatory (Pre-test: $M = 3.82$, $SD = .69$; Post-test: $M = 3.89$, $SD = .71$; $t(76) = -1.50$, $p = .14$) and the non-affirmatory (Pre-test: $M = 3.64$, $SD = .73$; Post-test: $M = 3.67$, $SD = .71$; $t(76) = -.63$, $p = .53$) groups showed no significant differences between pre and post-test self-esteem scores. However, the strongest results for self-esteem were predicted specifically with the social state self-esteem subscale. When the paired samples t-test was run specifically for the social state self-esteem subscale, significant differences between the affirmatory and non-affirmatory groups emerged.

The non-affirmatory group still showed no significant differences between pre-test and post-test social state self-esteem scores (Pre-test: $M = 3.72$, $SD = .96$; Post-test: $M = 3.71$, $SD = .97$; $t(76) = .30$, $p = .76$). However, the affirmatory message group shows a significant increase in state social self-esteem scores following exposure to the affirmatory advertisement (Pre-test: $M = 3.89$, $SD = .86$; Post-test: $M = 4.02$, $SD = .85$; $t(50) = .02$). Taken together, these results provide support for the fifth hypothesis.

The research question asked whether there were differences in directionally motivated reasoning outcomes between the partisan and non-partisan issue groups among participants exposed to the non-affirmatory versus affirmatory advertisements. In order to examine this, independent t-tests were run for all four directionally motivated processing outcomes (attitude polarization, counter-arguing, source credibility and self-esteem) for social security and gun rights separately. The magnitude of the effects were compared and detailed in Table 12. As Table 12 shows, there are no real differences between the social security and gun rights groups except on the issue of source credibility.

Table 12

Directionally Motivated Reasoning Differences Between Affirmatory and Non-Affirmatory Conditions by Issue Type

	Gun Rights			Social Security		
	<u>Affirmatory</u>	<u>Non-Affirmatory</u>	<u>t (df)</u>	<u>Affirmatory</u>	<u>Non-Affirmatory</u>	<u>t (df)</u>
Attitude Polarization	.01	.08	.51 (66)	.12	.34	1.20 (58)
Counter-arguing	.53	.52	-.05 (66)	.64	.61	-.35 (57)
Source Credibility	3.89	2.97	-2.46* (66)	3.01	3.06	.16 (58)
Self-Esteem	3.96	3.70	-1.59 (66)	3.79	3.64	-.75 (58)

Note. * $p < .05$

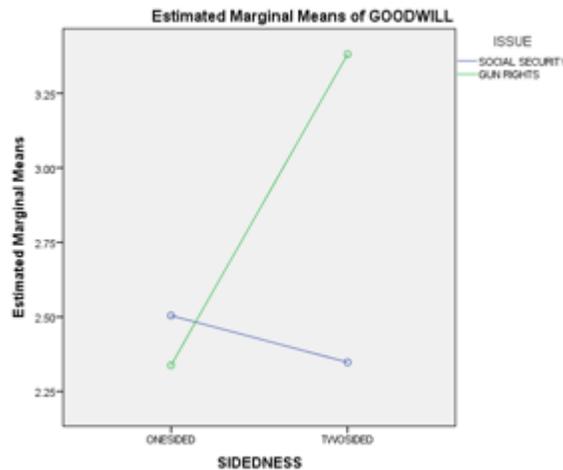
Further examination into this outcome demonstrates that participants in the gun rights group had significant differences on ratings of character (Non-affirmatory: $M = 3.29$, $SD = 1.46$; Affirmatory: $M = 3.99$, $SD = 1.66$; $t(66) = -1.84$, $p = .07$), competence

(Non-affirmatory: $M = 3.30$, $SD = 1.66$; Affirmatory: $M = 4.30$, $SD = 1.65$; $t(66) = -2.47$, $p = .02$) and goodwill (Non-affirmatory: $M = 2.34$, $SD = 1.48$; Affirmatory: $M = 3.38$, $SD = 1.65$; $t(66) = -2.73$, $p = .01$). However, the social security group had no significant differences on ratings of character (Non-affirmatory: $M = 3.21$, $SD = 1.45$; Affirmatory: $M = 2.99$, $SD = .93$; $t(58) = .65$, $p = .52$), competence (Non-affirmatory: $M = 3.46$, $SD = 1.37$; Affirmatory: $M = 3.70$, $SD = 1.24$; $t(58) = -.67$, $p = .50$) and goodwill (Non-affirmatory: $M = 2.50$, $SD = 1.40$; Affirmatory: $M = 2.35$, $SD = .89$; $t(58) = .48$, $p = .63$). As such, it appears that especially on the dimensions of goodwill and competence, the type of issue (partisan v. non-partisan made a difference).

This finding is reinforced by the formal test of these interactions as well. Turning first to goodwill, a two-way analysis of variance yielded a main effect of issue ($F(1, 160) = 2.88$, $p = .09$), indicating that goodwill scores were higher for participants in the gun rights condition ($M = 2.77$, $SD = 1.62$) compared to participants in the social security condition ($M = 2.44$, $SD = 1.22$). The main effect of message affirmation was also significant ($F(1, 160) = 3.02$, $p = .09$), indicating that participants in the affirmatory message condition reported higher goodwill scores ($M = 2.92$, $SD = 1.44$) than individuals in the non-affirmatory message condition ($M = 2.42$, $SD = 1.43$). However, the interaction of issue and message affirmation was significant ($F(1, 160) = 4.02$, $p = .05$), indicating that the effect of affirmatory messaging on goodwill evaluations was more pronounced in the gun rights condition compared to the social security condition. The overall R^2 of the model was .06 (see Figure 1).

Figure 1

Interaction of Issue Type and Message Type on Goodwill



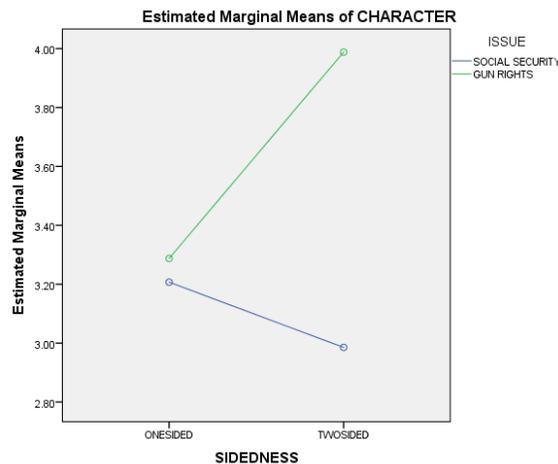
Turning next to character, a two-way analysis of variance yielded a main effect of issue ($F(1, 160) = 4.40, p = .04$) indicating that participants in the gun rights condition ($M = 3.58, SD = 1.57$) had higher evaluations of character overall than participants in the social security condition ($M = 3.12, SD = 1.27$). The main effect of affirmation was not significant ($F(1, 160) = .86, p = .36$). However, these main effects are qualified by the presence of a significant interaction ($F(1, 160) = 3.19, p = .08$), indicating that the discrepancy in character between the two issues was greater in the affirmatory message condition. The overall R^2 for the model was .04 (see Figure 2).

Finally, competence scores were subjected to a two-way analysis of variance. The results show a main effect of affirmation ($F(1, 160) = 5.18, p = .03$), indicating that participants in the affirmatory message condition reported significantly higher competence evaluations ($M = 4.03, SD = 1.50$) compared to those in the non-affirmatory message condition ($M = 3.37, SD = 1.52$). There was no main effect of issue ($F(1, 160) =$

.66, $p = .42$). Additionally, the interaction was non-significant ($F(1, 160) = 1.99, p = .16$).

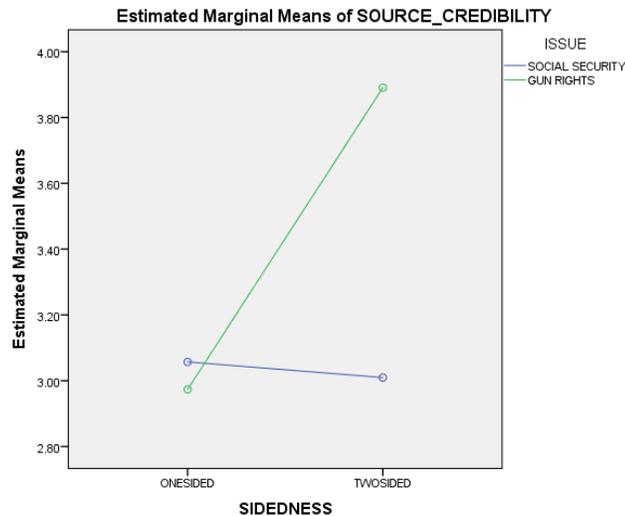
Figure 2

Interaction of Issue Type and Message Type on Character



Looking at the overall source credibility variable, a two-way analysis of variance yielded a main effect of affirmation ($F(1, 160) = 3.12, p = .08$), indicating that individuals in the affirmatory message condition ($M = 3.49, SD = 1.37$) had higher evaluations of source credibility than participants in the non-affirmatory message condition ($M = 3.01, SD = 1.38$). The main effect of issue was not significant ($F(1, 160) = 2.63, p = .11$). However, the interaction was significant ($F(1, 160) = 3.84, p = .05$), indicating that the discrepancy in source credibility between the non-affirmatory and affirmatory message conditions was greater in the gun rights condition. The overall R^2 for the model was .05 (see Figure 3).

Figure 3

Interaction of Issue Type and Message Type on Source Credibility

Overall, some of the group difference findings are supported by the more formal interaction tests. It appears that for source credibility ratings overall, the impact of the affirmatory message is greater when the issue is more partisan (i.e. gun rights). This is especially true for the specific source credibility dimensions of character and goodwill.

Turning to differences in behavioral outcomes, Table 13 outlines the chi-square outcomes for social security (affirmatory vs. non-affirmatory) and gun rights (affirmatory vs. non-affirmatory). Similar to the other motivated reasoning outcomes, there are few significant differences based on issue. However, there were significant differences within the gun rights group between the affirmatory and non-affirmatory conditions in desire to receive a monthly newsletter ($X^2(1, N=68) = 3.91, p = .05$).

Table 13

Behavioral Differences Between By Issue Type

	Gun Rights			Social Security		
	<u>Affirmatory</u>	<u>Non-affirmatory</u>	<u>X²</u>	<u>Affirmatory</u>	<u>Non-affirmatory</u>	<u>X²</u>
Sign a petition	75.0	75.0	.00	26.1	29.7	.09
Receive more information	42.9	45.0	.03	43.5	35.1	.42
Donate	3.6	0.0	2.45	4.3	5.4	.03
Receive monthly newsletter	28.6	10.0	3.91*	17.4	10.8	.53

Note. All number represent percentage of respondents who said they *would* engage in the behavior

* $p < .05$

Though the majority of participants did not want to receive more information (Non-affirmatory condition: 90% did not want to receive more information, Affirmatory condition: 71.4% did not want to receive more information), a statistically greater percentage of people in the affirmatory condition (28.6%) wanted to receive more information in the form of a newsletter compared to individuals in the non-affirmatory condition (10%). One possible explanation for this finding is that those in the gun rights group simply had stronger overall attitudes than those in the social security group, thus prompting them to act simply because they are more interested in the issue. However, an independent samples t-test comparing attitude strength between those in the gun rights group with those in the social security group suggests that this is not the case (Social security: $M = 3.90$, $SD = .80$; Gun rights: $M = 3.95$, $SD = .64$; $t(126) = -.372$, $p = .71$).

However, there is still very limited support for the idea that affirmatory messaging (at least in the small doses tested here) has strong behavioral outcomes.

Overall, these results suggest that group identity does not considerably change the intensity with which people engage in directionally motivated reasoning. It is possible that the affirmatory advertisements have a slightly more pronounced effect in the partisan issue condition as compared to the non-partisan issue condition, but the evidence to support this is limited, at best.

Discussion

The second experiment had three main goals. The first goal was to examine additional behavioral outcomes along with the cognitive and attitudinal outcomes examined in the first experiment. The second goal was to test the feasibility of affirmatory messaging in a situation where strong attitudes already exist. The third goal was to further examine the role of self-esteem in directionally motivated processing.

Turning to the first goal, there is limited evidence that affirmatory messaging can have a meaningful effect on behavior. Affirmatory messaging had no significant effect on participants likelihood of voting for a candidate or for supporting that candidate. The same is true for mobilization outcomes. Affirmatory messaging had no significant effect on participants desiring more information, donating or signing a petition related to the issue. The only behavioral measure with a significant difference was receiving a monthly newsletter on the issue. However, it would be premature to make any behavioral claims given the poor performance of the other behavioral indicators. As such, it seems unlikely that affirmatory messaging has significant behavioral effects.

The second goal sought to examine the feasibility of affirmatory messaging in a situation where strong attitudes already exist. The results from the second experiment provide limited evidence, at best, to support the idea that affirmatory messaging can have an effect on key attitudinal and behavioral outcomes. There is some evidence that affirmatory messaging can lead to more positive perceptions of source credibility, specifically evaluations of candidate competence. This is not an unimportant finding for politicians, as perceptions of competence have been shown to lead to more politically favorable outcomes. Funk (1997) found that politicians perceived as competent had more favorable evaluations and that voters rated competence as more important than other traits (such as warmth).

However, this enhanced credibility, in the context of this study, does not appear to have any lasting benefit for politicians. Affirmatory message strategies failed to make voter less polarized in their attitudes or less likely to counter-argue with the message. No participants changed the direction of their attitudes as a result of the message and while this particular result was not expected (due to the relatively weak manipulation), the strength with which participants held those attitudes was unchanged as well. The strong attitudes were unmoved. In fact, the only condition where participants showed a pre-test/post-test difference in attitudes was a traditional non-affirmatory advertisement, suggesting that the affirmatory format had no effect on attitudes.

Additionally, the affirmatory message strategy failed to reduce counter-arguing among participants. Overall, participants produced a median of two arguments, at least one of which they self-classified as negative. This finding is in line with previous

research motivated reasoning literature. Chaiken and Giner-Sorolla (1996) suggest that elaboration on an issue, especially if one is provided with both pro and con information, should lead participants to a more accuracy based reasoning. That is, elaboration should make people think about an issue more carefully. However, participants in this study clearly elaborated on the advertisement yet retained their biases. Just because individuals engage in more systematic processing (i.e. the generation of message-relevant thoughts) does not mean that they are doing so in an unbiased manner. Instead, it is possible that the counter-arguing simply reinforced the previously held attitudes, leading to little or no change.

The second objective of this experiment was to look closer into the role that state self-esteem played in directionally motivated processing. The results suggest, at first glance, that affirmatory messaging does in fact provide a self-esteem buffer that is not present in the non-affirmatory condition. However, a closer look at the results suggest that affirmatory messaging may not be acting in the hypothesized manner. The original hypothesis in this experiment was predicated on the belief that directionally motivated reasoning occurs because of a drop in self-esteem. Affirmatory messaging provides a buffer against this self-esteem drop. It is true that there are significant differences between the affirmatory and non-affirmatory message conditions, suggesting that self-esteem does indeed play a role. However, if a self-esteem drop was the mechanism behind directionally motivated reasoning, there should have been a drop in social state self-esteem between the pre and post-test in the non-affirmatory condition. Instead, what the results show is a significant *increase* in self-esteem between the pre and post-test in

the affirmatory condition. This suggests that the affirmatory advertisements are affecting the self-esteem of the participant in a positive way. However, what is not demonstrated by these results is that counter-attitudinal information, absent any affirmatory information, affects self-esteem in a negative way. Therefore, while affirmatory messaging may be providing a self-esteem boost, the non-affirmatory messaging does not appear to be providing any type of self-esteem hit. As such, the role that self-esteem plays in causing directionally motivated reasoning outcomes is at best, inconclusive.

Chapter VI: Discussion

Overall, this dissertation set out with three main objectives. The first objective was to add to the overall political advertising literature by examining the interplay between audience attitudes, a relevant message feature (affirmatory messaging) and relevant campaign outcomes. The second objective was to identify and isolate the mechanism that leads to directionally motivated reasoning: self-esteem. The third objective was to test a theory-based communication strategy that could be used to overcome directionally motivated reasoning. The effectiveness of each objective will be discussed in turn.

Affirmatory Messaging and Political Advertising

This dissertation set out with two main goals related to the political advertising literature. The first was to demonstrate the impact of motivated reasoning on political advertising effects. The second was to expand consideration of relevant variables when attempting to understand the impact of political advertising on voters. First, the results from these two experiments clearly demonstrate that political advertising effectiveness is strongly affected by prior voter attitudes and group identities. The first experiment demonstrated this effect most clearly. Though many group differences were found between the affirmatory and non-affirmatory message conditions, the sponsor evaluations were always stronger and more favorable when participants were shown an advertisement for a politician who matched their own party. In the case of source credibility, participants who saw an advertisement for a same-party politician rated said politician almost two full scale points higher than participants who saw an advertisement for an out-

party politician. This suggests that voter predispositions strongly influence the way they view and interpret political advertising. Far from passively accepting the claims made in political advertisements, voters counter-argue more with advertisements for politicians they dislike and political advertising shows little ability to move voters on the issues under investigation in this series of studies. This is not to say that voters are unmovable, but that political advertising has a large hurdle to overcome in the case of out-party voters. Contrary to Kaid's (2002) assertion that political advertising comes very close to fulfilling the direct effects paradigm, the results from these two studies suggest exactly the opposite- that the effectiveness of political advertising messages at changing attitudes or vote intention is highly dependent on prior voter attitudes and prior group loyalties. Additionally, this calls into question the premise of much past political advertising research. To the extent that partisanship is specifically excluded in analysis of political advertising effects (e.g., Fernandes, 2013), the results are unlikely to be universally applicable to the entire population of voters. This suggests that the attitudinal effects of negative political advertising may not be relevant in elections where candidates are previously known to voters. As such, this study confirms the work of prior studies that show the importance of partisanship in conditioning responses to political advertising messages.

The Role of Self-Esteem

The second main objective of this dissertation was to identify the mechanism that underpins directionally motivated reasoning. The theory suggests that people become defensive in the face of counter-attitudinal information because their self-esteem takes a

hit. This self-esteem drop requires bolstering, which individuals achieve through a variety of mechanisms including attitude polarization, counter-arguing, outgroup derogation and message source derogation. However, the role that self-esteem plays in directionally motivated reasoning remains unclear at the conclusion of these studies. The first experiment showed a marginally significant difference between conditions on state self-esteem, but stricter statistical tests failed to support this difference. The second experiment showed differences in self-esteem in the affirmatory condition, but these were associated with an *increase* in self-esteem from the baseline in the affirmatory condition, rather than a *drop* in self-esteem in the non-affirmatory condition.

For the hypothesized role of self-esteem to match what the theory suggests, the results should have shown a drop in self-esteem from the baseline, but only in the non-affirmatory condition. Participants in the non-affirmatory condition were shown only information that disagreed with their prior attitudes, beliefs and values. According to the theory, individuals exposed to this type of counter-attitudinal information should experience a self-esteem drop due to a threat to the self. In the affirmatory condition, the affirmatory message structure serves as affirmation of previously held attitudes and beliefs. The theory holds that this affirmation mitigates the self-esteem hit. The fact that self-esteem is significantly higher than the baseline in the affirmatory condition is not necessarily problematic to the original theory, as it is possible that the affirmatory messaging provides a boost in overall self-esteem. However, the absence of a clear drop in self-esteem from the baseline in the non-affirmatory condition *is* problematic for the theory as laid out above. To the extent that self-esteem shows no change from the

baseline in the non-affirmatory condition, it is impossible to conclude with any certainty that self-esteem is the correct mechanism.

There are a few possible explanations for these findings. The first is that self-esteem is the correct mechanism and measurement difficulties are the cause of the mixed results. The first experiment used a social state self-esteem scale that asked directly about happiness with group membership. This scale was designed to elicit state self-esteem evaluations related directly to the group. However, the questions proved to be entangled with party identification and loyalty. Indeed, post-hoc analyses showed a high degree of correlation between partisan identification scales and the modified group self-esteem scale. This is problematic to the extent that participants are simply viewing the self-esteem measures as another form of partisan identification (which in and of itself can be bolstering, thus masking any potential self-esteem effects). These measurement problems could mask any effect of self-esteem.

The findings from the second experiment support this interpretation as well. A more distant social state self-esteem scale showed significantly higher self-esteem among participants in the affirmatory conditions. However, as was noted, these findings do not support the hypothesis laid out by the motivated reasoning literature. That being said, another measurement issue is possible. It is possible that voters in the non-affirmatory condition *do* experience a self-esteem hit and immediately, upon reception of the advertisement, engage in bolstering activities to restore the stable sense of self. Though self-esteem was measured immediately following exposure to the advertisement, it is

possible that participants had already engaged in self-bolstering thoughts. This could account for a lack of findings.

One possible way to get around this issue is to consider alternative, physiological measures related to self-esteem. There is some work that suggests that self-esteem drops occur because individuals experience anxiety in response to stimuli that is physically or psychologically threatening (Greenberg et al., 1992). In this case, negative information about a preferred candidate or issue would be construed as psychologically threatening. However, Greenberg et al., 1992) are clear that the self-esteem drop would only occur in individuals experience a feeling of anxiety. It is possible that a single exposure to a political advertisement actually produced differential levels of anxiety in participants. That is, some participants felt anxious in response to the advertisement and some did not. The role of anxiety would suggest that motivated reasoning outcomes should exist only among those participants who were made anxious. That is, if a participant did not feel anxious in response to information presented in a political advertisement, there would be no subsequent self-esteem drop and thus no reason to engage in motivated reasoning. The assumption of this work has been that the contentious political nature would create a high-anxiety environment for voters, but it seems likely that there would be individual variation in predispositions toward anxiety. Unfortunately, data to speak to this issue directly is beyond the scope of this dissertation. However, it would be worthwhile to introduce some physiological measures to attempt to directly address this question. Two particular physiological measures that come to mind include galvanic skin response as well as heart rate. Using physiological measures would allow the researcher to see the

exact point at which participants began to feel anxiety (through the measurement of arousal). The literature, in this case, would suggest that self-esteem **does** matter but only when mediated by anxiety. Put differently, in the absence of anxiety, motivated reasoning has little reasoning to exist. Therefore, participants who were not rendered anxious by the stimuli would not exhibit strong motivated reasoning outcomes. As such, the role of anxiety requires further consideration, both as a mediator of self-esteem as well as a potential proxy measure for measuring self-esteem.

A second possibility is that self-esteem is not the correct mechanism and that other potential mechanisms of motivated reasoning should be explored. Affirmation is a communication technique that is very specific to self-esteem and would be less effective as a communication strategy if the underlying psychological mechanism is not self-esteem. There is also evidence to support this conclusion, as no mediating effects were uncovered for self-esteem. At the current time, these experiments do not provide enough evidence to adjudicate between these two possibilities.

The Effectiveness of Affirmatory Messaging

The final objective of this dissertation was to examine the effectiveness of affirmatory messaging. There are a few different issues regarding affirmatory messaging that this dissertation hopes to speak to. The first is the feasibility of third-party affirmation. Traditionally, affirmation studies have relied on the process of self-affirmation, or individuals affirming themselves. It is not known whether a third party can successfully use affirmation in the same manner. Second, this dissertation speaks directly to the feasibility of affirmatory political advertising. There is evidence that two-

sided advertising works in a product context, but it is unknown whether this type of strategy would translate to the political realm, which boasts stronger policy attitudes and group loyalties. Third, these experiments sought to understand what exactly leads to directionally motivated reasoning. Is it simply attitude-challenging information? Or do voters experience defensive outcomes because they feel that their group is being attacked?

First, this dissertation attempted to understand the feasibility of affirming individuals through a third-party. It is difficult to speak with great certainty to this issue, as affirmation is a non-measurable outcome. Past literature has merely assumed that any group differences were related to the affirmation process. The results of these experiments suggest, however, that a third-party affirmation is possible, as seen in the reduction of some motivated reasoning outcomes.

However, it is important to consider a potential alternative explanation to these findings. It is possible that individuals, rather than feeling affirmed, actually experienced a drop in political cynicism as a result of the advertisement. To the extent that political cynicism is negatively related to attitudinal outcomes (Pattyn, Van Hiel, Dhont & Onraet, 2012), a drop in political cynicism could account for some of the key findings from these experiments. However, the data suggest that this is not the case. There are no significant differences between the four conditions (non-affirmatory, in-party sponsor; affirmatory, in-party sponsor; non-affirmatory, out-party sponsor; affirmatory, out-party sponsor) in the first experiment ($F(7, 615) = .50, p = .84$) and the two main conditions (non-affirmatory versus affirmatory) of the second experiment ($t(162) = -.60, p = .55$). As

such, it seems unlikely that political cynicism is the main driver of the findings from the two experiments. If affirmatory messaging was working through political cynicism, lower cynicism scores would be expected in the affirmatory condition, but that is not the case.

Additionally, the self-esteem findings from the second experiment help to support the contention that outside affirmation is possible. The increase in self-esteem from the baseline in the affirmatory condition suggests that affirmation did positively impact the self-esteem of the participants. As such, it appears that it is possible for a third party to affirm voters. However, more study of this is necessary.

However, just because affirmation is possible does not mean that it leads to positive outcomes in the political arena. The two experiments conducted provide mixed results for the positive benefits of affirmation. Results from the first experiment suggest that affirmatory messaging led to less counter-arguing and more positive perceptions of source credibility. Some of these results were replicated in the second experiment, with affirmatory messaging producing more positive perceptions of source credibility. However, many of the other directionally motivated reasoning outcomes seem unaffected by the presence of affirmatory messaging. Beyond the benefit to source credibility, it is difficult to conclude with any certainty that affirmatory messaging leads less attitude polarization or counter-arguing.

Finally, it appears that simply challenging a strong attitude is enough to induce directionally motivated processing, absent any specific group attack. The first experiment specifically relied on group membership (i.e. partisanship) to induce directionally motivated processing. However, the second experiment specifically asked whether it was

truly attacks on group membership that were leading to directionally motivated processing or simply the attitude challenge itself. The only variable that showed any significant differences between the non-affirmatory and affirmatory advertisement in the non-partisan (i.e. attitudes only) versus partisan (i.e. attitudes + group membership) issue conditions was source credibility. Overall, when strong attitudes are challenged, regardless of whether group membership is likewise challenged, individuals feel threatened and react in a defensive manner.

Implications for Theory

Overall, the results of this study have several implications for the theory of motivated reasoning. Taber and Lodge (2006) stated that motivated consumption of information is the default processing mode in which voters engage. The evidence collected from this series of experiments suggest that they may be correct. In an arena where strong prior attitudes exist, voter attitudes and behavior are difficult to move. To the extent that voters are presented with arguments that go against their strongly-held attitudes, they are unmovable. Moving voters to a more reasoned, accuracy based approach appears extremely difficult. There are a few potential reasons why this may be the case.

First, it is possible that strong attitudes are simply hard to overcome, especially in the current polarized climate. Nyhan et al. (2014) demonstrated this in their study with anti-vaccine parents. Recent work by Luguri and Napier (2013) showed similar results- when partisan identity is salient, voters are more polarized. Given the current campaign cycle and 24 hour news coverage, one could make the argument that partisan identity is

always salient. Campaigns are covered largely using horse-race, competition-based coverage which helps to foster an “us vs. them” mentality among viewers. As such, the continued activation of already strong attitudes simply allows individuals to continually reinforce what they already believe. Given the preponderance of opinions and information currently available for consumption, it becomes even more difficult to shift attitudes, as individuals are perfectly capable of never having to encounter greater proportions of counter-attitudinal information (the “tipping” point of motivated reasoning, as hypothesized by Redlawsk et al. (2010), occurs when individuals are faced with extensive amounts of attitude disconfirming information). Indeed, Garrett (2009) found that voters make good use of the current information environment by actively searching for information that directly supports their previously held attitudes.

This is compounded by the current political environment. Likely voters are strongly polarized and this polarization is largely driven by hostility toward members of the opposing party (PEW, 2014a). This is compounded by evidence that polarized voters are highly selective in their media choices and are more likely to create “political echo chambers” on social media (PEW, 2014b). All of these conditions together result in highly polarized voters with consistently salient partisan identity who actively search for information that reinforces their already strongly-held attitudes. As such, the combination of the current information environment with the current political environment provides too strong of a buffer for affirmatory messaging to break through. It is also possible that this magnified political environment makes voters highly reactive, such that any attitude

confirming information in an advertisement carries less weight than attitude disconfirming information.

However, it is also possible that voters possess an inherent distrust of political advertising, which prevents this specific mode of communication from being effective. A recent survey by the Project on Campaign Conduct shows that 59% of voters feel that politicians twist the truth in campaign advertising. This shows a high level of mistrust in political advertising, which may influence the outcome of these series of experiments. To the extent that voters are highly mistrustful of political advertising as a genre, it is unlikely that affirmatory advertising will have much effect.

Finally, it could be the case that repeated exposure to counter-attitudinal information on an issue has allowed voters to already create self-esteem buffers, rendering the affirmation unnecessary. All of the arguments used in the stimuli were based off of real arguments presented by real politicians on both sides of the relevant issue. It is possible that participants in this experiment have already encountered many of the counter-attitudinal arguments already and have created their own cognitive and affective “buffers” in the face of this information. This type of explanation would help to account for the self-esteem findings in the second experiment. To the extent that voters already have self-esteem buffers in place, affirmatory messaging is not providing a needed service.

Additionally, the psychological distance between the participants and the politician may render affirmatory messaging less effective. In Cohen et al.’s (2007) study on abortion attitudes, participants were required to interact with other real people who

held opposing views. The face-to-face interaction with another person may change the way that the affirmation functions. Political advertising is impersonal and there is large physical and psychological distance between the voter and the politician. It is possible that this distance does not provide a large self-esteem threat to voters. It is possible that this type of messaging strategy may be more effective in a rally or stump speech situation where there is less distance between voters and politicians.

Implications for Practitioners

The implications for practitioners are somewhat different. The main, consistent finding of both studies is that affirmatory advertising helps to create more positive impressions of source credibility among participants. Source credibility leads to a host of desirable, strategic outcomes. Till and Busler (1998) found that higher source credibility was associated with more positive brand attitudes, while Greer (2003) found that higher source credibility led to more positive perceptions of information credibility. Yoon et al. (2005) found that participants had higher intentions to vote for a candidate, even in a negative political advertising situation, if that candidate was considered to be highly credible. Succinctly put, people are more likely to believe information from a source if they find that source to be credible and are more likely to act on that belief.

As such, in line with previous explanations given above, it may be that affirmatory advertising has positive overall effect on source credibility that endures over time. It is possible that repeated exposure to this type of advertisement may allow voters to come to trust an out-party member and be more receptive to information provided by that out-party member. Future research should begin to examine the cumulative effect of

affirmatory advertising over the course of a campaign on source credibility ratings of a candidate. It is possible that indulging in both affirmatory and traditional attack advertising may provide voters with a net neutral feeling toward an out-party candidate, with the traditional attack advertising used in campaigns outweighing any positive benefits that affirmatory advertising has on voters' perceptions of source credibility.

Additionally, there appear to be few risks for politicians in engaging in affirmatory advertising. Throughout the first experiment, there were no findings to suggest that there were differences in evaluations between same-party voters who saw an affirmatory versus a non-affirmatory advertisement. Affirmatory advertising did not repel those already loyal to the politician. As such, there appears to be little risk to campaigns in engaging in this type of advertising and potential positive benefits to campaigns.

Furthermore, the ability of campaigns to engage in micro-targeting can reduce the likelihood that these types of advertisements would be widely seen by members of their own party. Direct mail remains the dominant strategy by which campaigns attempt to micro-target on very specific issues (Cillizza, 2007). Therefore, campaigns could take advantage of the ability to send highly targeted messages to very specific voters, thus ensuring that members of their own party do not receive these advertisements. However, there are some obvious limitations to direct mail that should be considered. Direct mail is a rather dry medium-politicians rely wholly on pictures and text to communicate with voters. This discounts the very real effect that peripheral cues such as music and cuts have in televised political advertisements (Yoon et al., 2005). In an affirmatory messaging context, music cues could play a couple different role. First, politicians could

use musical cues to reinforce the nature of the information being presented (i.e. playing happier music while discussing the positive aspects of their opponent and switching to more serious music while discussing the negative aspects of their opponent). In this way, politicians could use music to reinforce their message. Conversely, politicians could also use audio cues to reinforce the desired take-away of voters throughout the advertisement by playing more serious music throughout the entirety of the spot (thus reinforcing peripherally the desired negative conclusions).

Finally, using affirmatory messaging provides distinct advantages to campaigns that demotivating voters does not. One common reason campaigns engage in negative political advertising is to decrease turnout among the opposition's voters. From a theoretical standpoint, this makes sense, as taking away votes from an opponent increases the likelihood of electoral success. However, recent research suggests that far from performing this function, negative political advertising actually serves as a fairly weak cross-pressure to voters (Matthes & Marquart, 2015). That is, intent to participate in an election is not significantly affected by exposure to negative political advertising. This finding is supported by other work as well. Kahn and Kenney (1999) found that unless attacks on a favored candidate were perceived as fair, demobilization did not occur. This finding, coupled with Stevens et al.'s (2008) finding that partisans perceive almost all attacks on their favored candidate as unfair, reinforces the idea that negative political advertising is unlikely to demobilize any significant portion of the electorate. This is where affirmatory messaging can be particularly useful to campaigns. Given that they have the ability to speak only to out-party voters (through micro-targeting) and that

traditional negative campaigning generally fails to demotivate voters, affirmatory messaging represents a low-risk opportunity to gain support from out-party voters.

Limitations

These experiments have a few limitations that need to be addressed. General limitations of both studies will be addressed first, followed by limitations to each specific study. The first limitation is the somewhat unique Mechanical Turk sample. There are some questions about the nature of partisans on MTurk, especially Republicans (Kahan, 2013). Kahan (2013) suggests that Republicans on MTurk are more similar to libertarians than they are to traditional conservative Republicans. Additionally, MTurk is slightly over-populated by Democrats, younger adults, higher educated adults and lacks, most especially, conservative males. Additionally, individuals self-select into the survey, meaning that samples overall tend to contain an over-sample of politically interested individuals. Therefore, the results from these experiments are likely to be most relevant among the politically interested.

However, for these particular studies, there is little reason to think that there would be asymmetrical differences in likelihood of engaging in motivated reasoning between Democrats and Republicans. There is no evidence to suggest that motivated reasoning is the unique domain of any one political party. There is evidence to suggest that motivated reasoning is stronger among political sophisticates, including those with above-average interests in politics (Taber & Lodge, 2006). As such, to the extent that MTurk samples represent political sophisticates, this simply provides a harder test for the hypotheses at hand.

A second overall limitation is the use of direct mail pieces as opposed to television spots. Though direct mail remains a prevalent form of campaign communication, audio-visual spots (both on TV and online) remain one of the most dominant forms of campaign communication and make up many voter encounters with candidates. Therefore, it is possible that reading arguments does not have the same effect that hearing candidates speak would have. However, the direct mail platform does offer distinct advantages for candidates. Direct mail would provide campaigns a way to reach only those voters who do not currently support the campaign (or match the political party of the sponsoring candidate). This would help ensure, from a base-safety perspective, that candidates are not communicating positive information about an opponent to their base. Though the results of these experiments show that there is no adverse effect on the base, it seems likely that campaigns would still want to exercise caution in this area.

A third limitation is the nature of forced attention to the stimuli. Participants were explicitly instructed to carefully read the advertisement for evaluation. This is obviously much more attention than would normally be paid to direct mail pieces in a voter's natural environment. However, careful attention was necessary to the experiment to ensure that voters were able to correctly identify the structure of the argument, in order to test the effects of this type of argument. Whether this type of advertisement would be clearly understood within the context of a busy campaign environment remains a question for future research.

Turing to the individual studies, each study had their own set of limitations. The measurement of self-esteem proved challenging in the first experiment. In retrospect, a

baseline measure of self-esteem prior to viewing the advertisements would have been helpful, especially considering that the theory predicted a drop in the non-affirmatory condition from the baseline. Additionally, the self-esteem measures were not immediately following exposure to the advertisement, which may have given participants an opportunity to self-bolster, thus masking any potential self-esteem effects. Finally, pre-testing this measure may have exposed the high correlation with partisan identification and another scale could have been substituted.

The first limitation from the second experiment regards the percentage of the sample who failed the manipulation check (22%). It is very possible that there is something systematically different about participants who failed to correctly identify the structure of the advertisement. While no obvious demographic differences emerged between those who passed the manipulation check and those who did not, it is quite possible that other personality traits may account for the failure to correctly pass the manipulation check. One that comes to mind is need for cognition, which would lead individuals to pay more attention to the nature of the information. Additionally, it could simply be that these individuals are less likely to pay attention to political advertising in general. Overall, it is impossible to say with 100% certainty that there are no systematic differences between those who passed the manipulation check and those who failed.

The second limitation from the second experiment is more of a retrospective regret than a limitation. In retrospect, it would have been beneficial to include more directional attitude measures for each issue rather than just a forced-choice question. The forced-choice question only allowed for participants to fully change their mind on an

issue to see evidence of attitude change. The inclusion of some scales with more choice options would have provided the opportunity to see movement toward the mid-point of the scale with more precision.

Future Research

There are several changes that may have implications for this type of strategy. The first direction for future research is to replicate these findings using real candidates during an presidential election year. This takes advantage of pre-existing candidate attitudes and can focus on real issues that are of interest to the current campaign season. This would help provide a more realistic test of the first experiment- rather than creating attitudes toward a candidate, those attitudes would already exist.

Second, it would be beneficial to the external validity of these studies to test an affirmatory strategy in a more realistic campaign environment. This includes a change in stimuli modality (i.e. change to an audio-visual format) as well as a change in viewing environment. The forced attention paradigm, while necessary for the current experiments, contributes more to internal rather than external validity. Allowing participants to encounter the messages in a more naturalized environment (e.g. in a living room setting, as part of a program) would allow researchers to study the effect of affirmatory advertising within a more competitive environment (i.e. when attentional resources may be more scarce).

Third, within the actual campaign environment, voters are exposed to many different advertisements for a candidate as well as the same advertisements repeatedly. It would be beneficial to examine not only the effect of seeing the same advertisement

multiple times within a program but also the cumulative effect of multiple, different affirmatory advertisements over time. Due to high levels of cynicism regarding political advertising, it is possible that multiple affirmatory advertisements, over time, from a campaign would have stronger and more lasting effects on voters. While this type of study would not be as useful for continuing to investigate the mechanism, it would be very useful in addressing outcomes.

Similar to the above research, it would also be fruitful to examine the effects of affirmatory messaging alongside more traditional attack advertising. Do the benefits of affirmatory messaging stand up when combined with more traditional attack advertising as part of an overall campaign strategy? It is possible that the benefits of affirmatory messaging would be erased when voters are confronted by the same candidate engaging in more traditional forms of negative political advertising.

Final Word

In closing, it appears that affirmatory messaging may help reduce some directionally motivated reasoning outcomes, but more testing and research is needed to fully understand the effects of this type of political advertisement. More such research can only be beneficial to both voters and campaigns, as campaign communication strategies continue to evolve.

References

- Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology, 18*(4), 317-334. doi: 10.1002/ejsp.2420180403
- Ansolabehere, S., & Iyengar, S. (1995). *Going negative: How political advertising shrinks and polarizes the electorate*. New York: New York Free Press.
- Ansolabehere, S., Iyengar, S., Simon, A., & Valentino, N. (1994). Does attack advertising demobilize the electorate? *American Political Science Review, 88*(04), 829-838.
<http://dx.doi.org/10.2307/2082710>
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon. com's Mechanical Turk. *Political Analysis, 20*(3), 351-368. doi: 10.1093/pan/mpr057
- Blascovich, J. & Tomaka, J. (1991). Measures of self-esteem. In J.P. Robinson, P.R. Shaver, L.S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes*. (pp. 115-160). San Diego, CA: Academic Press Inc.
- Bohner, G., Einwiller, S., Erb, H. P., & Siebler, F. (2003). When small means comfortable: Relations between product attributes in two-sided advertising. *Journal of Consumer Psychology, 13*(4), 454-463.
doi:10.1207/S15327663JCP1304_12
- Bolsen, T., Druckman, J. N., & Cook, F. L. (2014). The influence of partisan motivated reasoning on public opinion. *Political Behavior, 36*(2), 235-262. doi: 10.1007/s11109-013-9238-0

- 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. doi: 10.1111/j.1540-5907.2008.00353.x
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86(2), 307.
<http://dx.doi.org/10.1037/0033-2909.86.2.307>
- Carraro, L., Gawronski, B., & Castelli, L. (2010). Losing on all fronts: The effects of negative versus positive person-based campaigns on implicit and explicit evaluations of political candidates. *British Journal of Social Psychology*, 49(3), 453-470. doi: 10.1348/014466609X468042
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior*, 29(6), 2156-2160.
doi:10.1016/j.chb.2013.05.009
- Chen, S., Duckworth, K., & Chaiken, S. (1999). Motivated heuristic and systematic processing. *Psychological Inquiry*, 10(1), 44-49. doi:
10.1207/s15327965pli1001_6
- Cillizza, C. (2007). Romney's data cruncher. *The Washington Post*, 5.

- Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical Turk valid for research on political ideology?. *Research & Politics*, 2(4), 1-9. doi: 10.1177/2053168015622072
- Cohen, A.R. (1959). Some implications of self-esteem for social influence. In C.I. Hovland & I.L. Janis (Eds.), *Personality and persuasibility*, (pp. 102-120). Oxford, England: Yale University Press.
- Cohen, G. L., Sherman, D. K., Bastardi, A., Hsu, L., McGoey, M., & Ross, L. (2007). Bridging the partisan divide: Self-affirmation reduces ideological closed-mindedness and inflexibility in negotiation. *Journal of Personality and Social Psychology*, 93(3), 415-430. <http://dx.doi.org/10.1037/0022-3514.93.3.415>
- Colleoni, E., Rozza, A., & Arvidsson, A. (2014). Echo chamber or public sphere? Predicting political orientation and measuring political homophily in Twitter using big data. *Journal of Communication*, 64(2), 317-332.
doi: 10.1111/jcom.12084
- Crocker, J., & Luhtanen, R. (1990). Collective self-esteem and ingroup bias. *Journal of Personality and Social Psychology*, 58(1), 60-67. <http://dx.doi.org/10.1037/0022-3514.58.1.60>.
- Crowley, A. E., & Hoyer, W. D. (1994). An integrative framework for understanding two-sided persuasion. *Journal of Consumer Research*, 561-574.
<http://www.jstor.org/stable/2489759>

- Daignault, P., Soroka, S., & Giasson, T. (2013). The Perception of Political Advertising During an Election Campaign: A Measure of Cognitive and Emotional Effects. *Canadian Journal of Communication, 38*(2).
- Dietz-Uhler, B. (1999). Defensive reactions to group-relevant information. *Group Processes & Intergroup Relations, 2*(1), 17-29. doi: 10.1177/1368430299021002
- Dipboye, R. L. (1977). The effectiveness of one-sided and two-sided appeals as a function of familiarization and context. *The Journal of Social Psychology, 102*(1), 125-131. doi: 10.1080/00224545.1977.9713248
- Druckman, J. N., & Bolsen, T. (2011). Framing, motivated reasoning, and opinions about emergent technologies. *Journal of Communication, 61*(4), 659-688. doi: 10.1111/j.1460-2466.2011.01562.x
- Dunning, D., Leuenberger, A., & Sherman, D. A. (1995). A new look at motivated inference: are self-serving theories of success a product of motivational forces?. *Journal of Personality and Social Psychology, 69*(1), 58-68. <http://dx.doi.org/10.1037/0022-3514.69.1.58>
- Edwards, K., & Smith, E. E. (1996). A disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology, 71*(1), 5-24. <http://dx.doi.org/10.1037/0022-3514.71.1.5>
- Eisend, M. (2006). Two-sided advertising: A meta-analysis. *International Journal of Research in Marketing, 23*(2), 187-198. doi: 10.1016/j.ijresmar.2005.11.001

- Etgar, M., & Goodwin, S. A. (1982). One-sided versus two-sided comparative message appeals for new brand introductions. *Journal of Consumer Research*, 460-465.
<http://www.jstor.org/stable/2489035>
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73(1), 31-44. <http://dx.doi.org/10.1037/0022-3514.73.1.31>
- Felson, R. B. (1984). The effect of self-appraisals of ability on academic performance. *Journal of Personality and Social Psychology*, 47(5), 944-952.
<http://dx.doi.org/10.1037/0022-3514.47.5.944>
- Fernandes, J. (2013). Effects of negative political advertising and message repetition on candidate evaluation. *Mass Communication and Society*, 16(2), 268-291. doi: 10.1080/15205436.2012.672615
- Festinger, L. (1962). *A theory of cognitive dissonance* (Vol. 2). Palo Alto, CA: Stanford University Press.
- Freed, G. L., Clark, S. J., Butchart, A. T., Singer, D. C., & Davis, M. M. (2010). Parental vaccine safety concerns in 2009. *Pediatrics*, 125(4), 654-659.
<http://dx.doi.org/10.1542/peds.2009-1962>
- Freund, T., Kruglanski, A. W., & Shpitzajzen, A. (1985). The freezing and unfreezing of impressional primacy effects of the need for structure and the fear of invalidity. *Personality and Social Psychology Bulletin*, 11(4), 479-487. doi: 10.1177/0146167285114013

- Fridkin, K. L., & Kenney, P. J. (2004). Do negative messages work? The impact of negativity on citizens' evaluations of candidates. *American Politics Research*, 32(5), 570-605. doi: 10.1177/1532673X03260834
- Fridkin, K. L., & Kenney, P. (2011). Variability in citizens' reactions to different types of negative campaigns. *American Journal of Political Science*, 55(2), 307-325. doi: 10.1111/j.1540-5907.2010.00494.x
- Friedman, H. S. (1978). The relative strength of verbal versus nonverbal cues. *Personality and Social Psychology Bulletin*, 4(1), 147-150. doi: 10.1177/014616727800400132
- Garramone, G. M. (1985). Effects of negative political advertising: The roles of sponsor and rebuttal. *Journal of Broadcasting & Electronic Media*, 29(2), 147-159. doi: 10.1080/08838158509386573
- Garramone, G. M., Atkin, C. K., Pinkleton, B. E., & Cole, R. T. (1990). Effects of negative political advertising on the political process. *Journal of Broadcasting & Electronic Media*, 34(3), 299-311. doi: 10.1080/08838159009386744
- Garramone, G. M., & Smith, S. J. (1984). Reactions to political advertising: Clarifying sponsor effects. *Journalism Quarterly*, 61(4), 771-775.
- Garrett, R. K. (2009). Politically motivated reinforcement seeking: Reframing the selective exposure debate. *Journal of Communication*, 59(4), 676-699. doi: 10.1111/j.1460-2466.2009.01452.x

- Golden, L.L. & Alpert, M.I. (1987). Comparative analysis of the relative effectiveness of one- and two- sided communication for contrasting products. *Journal of Advertising*, 16 (1), 18-25. <http://www.jstor.org/stable/4188610> .
- Goldstein, K., & Freedman, P. (2002). Campaign advertising and voter turnout: New evidence for a stimulation effect. *The Journal of Politics*, 64(03), 721-740. <http://dx.doi.org/10.1111/022-3816.00143>
- Graham J, Nosek BA, & Haidt J. (2012). The moral stereotypes of liberals and conservatives: Exaggeration of differences across the political spectrum. *PLoS ONE*, 7(12): e50092. doi:10.1371/journal.pone.0050092
- Greenberg, J., Solomon, S., Pyszczynski, T., Rosenblatt, A., Burling, J., Lyon, D., & Pinel, E. (1992). Why do people need self-esteem? Converging evidence that self-esteem serves an anxiety-buffering function. *Journal of personality and social psychology*, 63(6), 913-922. <http://dx.doi.org/10.1037/0022-3514.63.6.913>
- Greene, S. (1999). Understanding party identification: A social identity approach. *Political Psychology*, 20(2), 393-403. doi: 10.1111/0162-895X.00150
- Hart, P. S., & Nisbet, E. C. (2012). Boomerang effects in science communication: How motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies. *Communication Research*, 39(6), 701-723. doi: 10.1177/0093650211416646
- Heath, R. L., & Douglas, W. (1991). Effects of involvement on reactions to sources of messages and to message clusters. *Journal of Public Relations Research*, 3(1-4), 179-193. doi: 10.1207/s1532754xjpr0301-4_9

- Hillygus, D. S., & Shields, T. G. (2008). *The persuadable voter: Wedge issues in presidential campaigns*. Princeton, NJ: Princeton University Press.
- Housholder, E. E., & LaMarre, H. L. (2014). Facebook politics: Toward a process model for achieving political source credibility through social media. *Journal of Information Technology & Politics*, *11*(4), 368-382. doi: 10.1080/19331681.2014.951753
- Huddy, L., Mason, L., & Aarøe, L. (2015). Expressive partisanship: Campaign involvement, political emotion, and partisan identity. *American Political Science Review*, *109*(01), 1-17. <http://dx.doi.org/10.1017/S0003055414000604>
- Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication*, *59*(1), 19-39. doi: 10.1111/j.1460-2466.2008.01402.x
- Jasperson, A. E., & Fan, D. P. (2002). An aggregate examination of the backlash effect in political advertising: The case of the 1996 US Senate race in Minnesota. *Journal of Advertising*, *31*(1), 1-12. doi: 10.1080/00913367.2002.10673656
- Kahn, K. F., & Kenney, P. J. (1999). Do negative campaigns mobilize or suppress turnout? Clarifying the relationship between negativity and participation. *American Political Science Review*, *93*(04), 877-889. <http://dx.doi.org/10.2307/2586118>

Kaid, L. L. (2002). Political advertising and information seeking: Comparing exposure via traditional and Internet channels. *Journal of Advertising*, 31(1), 27-35.

doi:10.1080/00913367.2002.10673658

Kaid, L. L., Chanslor, M., & Hovind, M. (1992). The influence of program and commercial

type on political advertising effectiveness. *Journal of Broadcasting & Electronic Media*, 36, 303-320.

Kamins, M. A., & Assael, H. (1987). Two-sided versus one-sided appeals: A cognitive perspective on argumentation, source derogation, and the effect of disconfirming trial on belief change. *Journal of Marketing Research*, 24(1), 29-39. doi:

10.2307/3151751

Kamins, M. A., & Marks, L. J. (1987). Advertising puffery: The impact of using two-sided claims on product attitude and purchase intention. *Journal of Advertising*, 16(4), 6-15. *Marketing Research*, 29-39. doi:

10.1080/00913367.1987.10673090

Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual Review of Psychology*, 31(1), 457-501. doi: 10.1146/annurev.ps.31.020180.002325

Kline, P. (1993). *The handbook of psychological testing*. London: Routledge.

Knobloch-Westerwick, S., & Meng, J. (2009). Looking the other way selective exposure to attitude-consistent and counterattitudinal political information. *Communication Research*, 36(3), 426-448. doi: 10.1177/0093650209333030

- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480-494. <http://psycnet.apa.org/doi/10.1037/0033-2909.108.3.480>
- LaMarre, H. L., Landreville, K. D., & Beam, M. A. (2009). The irony of satire: Political ideology and the motivation to see what you want to see in The Colbert Report. *The International Journal of Press/Politics*, 14(2), 212-231. doi: 10.1177/1940161208330904
- Lau, R. R., Andersen, D. J., & Redlawsk, D. P. (2008). An exploration of correct voting in recent US presidential elections. *American Journal of Political Science*, 52(2), 395-411. doi: 10.1111/j.1540-5907.2008.00319.x
- Lau, R. R., & Redlawsk, D. P. (1997). Voting correctly. *American Political Science Review*, 91(03), 585-598. <http://dx.doi.org/10.2307/2952076>
- Lau, R. R., & Redlawsk, D. P. (2006). *How voters decide: Information processing in election campaigns*. Cambridge: Cambridge University Press.
- Lebo, M. J., & Cassino, D. (2007). The aggregated consequences of motivated reasoning and the dynamics of partisan presidential approval. *Political Psychology*, 28(6), 719-746. doi: 10.1111/j.1467-9221.2007.00601.x
- Lemyre, L., & Smith, P. M. (1985). Intergroup discrimination and self-esteem in the minimal group paradigm. *Journal of Personality and Social Psychology*, 49(3), 660-670. <http://dx.doi.org/10.1037/0022-3514.49.3.660>
- Lenz, G. S. (2013). *Follow the leader? How voters respond to politicians' policies and performance*. Chicago: University of Chicago Press.

- Levitan, L., & Wronski, J. (2014). Social context and information seeking: Examining the effects of network attitudinal composition on engagement with political information. *Political Behavior*, 36(4), 793-816. 10.1007/s11109-013-9247-z
- Lodge, M., & Taber, C. S. (2013). *The rationalizing voter*. Cambridge, London: Cambridge University Press.
- Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: the effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37(11), 2098-2109. <http://psycnet.apa.org/doi/10.1037/0022-3514.37.11.2098>
- Matthes, J. & Marquart, F. (2015). A new look at campaign advertising and political engagement: Exploring the effects of opinion-congruent and –incongruent political advertisements. *Communication Research*, 42(1), 134-155. doi: 10.1177/0093650213514600
- McCroskey, J. C., & Teven, J. J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communications Monographs*, 66(1), 90-103. doi: 10.1080/03637759909376464
- McCroskey, J. C., Young, T. J., & Scott, M. D. (1972). The effects of message sidedness and evidence on inoculation against counterpersuasion in small group communication. *Speech Monographs*, 39(3), 205-212. doi: 10.1080/03637757209375758
- Meffert, M. F., Chung, S., Joiner, A. J., Waks, L., & Garst, J. (2006). The effects of negativity and motivated information processing during a political

campaign. *Journal of Communication*, 56(1), 27-51. doi: 10.1111/j.1460-2466.2006.00003.x

Meirick, P. (2002). Cognitive responses to negative and comparative political advertising. *Journal of Advertising*, 31(1), 49-62. doi: 10.1080/00913367.2002.10673660

Nyhan, B., Reifler, J., Richey, S., & Freed, G. L. (2014). Effective messages in vaccine promotion: a randomized trial. *Pediatrics*, 133(4), e835-e842.

<http://dx.doi.org/10.1542/peds.2013-2365>

Pechmann, C. (1992). Predicting when two-sided ads will be more effective than one-sided ads: The role of correlational and correspondent inferences. *Journal of Marketing Research*, 441-453. <http://www.jstor.org/stable/3172710>

Petersen, M. B., Skov, M., Serritzlew, S., & Ramsøy, T. (2013). Motivated reasoning and political parties: Evidence for increased processing in the face of party cues. *Political Behavior*, 35(4), 831-854. doi: 10.1007/s11109-012-9213-1

Petty, R. E., & Cacioppo, J. T. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology*, 37(10), 1915-1926.

<http://psycnet.apa.org/doi/10.1037/0022-3514.37.10.1915>

Petty, R. E., & Cacioppo, J. T. (1986). *The elaboration likelihood model of persuasion* (pp. 1-24). New York: Springer New York.

- Phillips, J. M., Urbany, J. E., & Reynolds, T. J. (2008). Confirmation and the effects of valenced political advertising: A field experiment. *Journal of Consumer Research*, 34(6), 794-806. <http://dx.doi.org/10.1086/523287>
- Pinkleton, B. (1997). The effects of negative comparative political advertising on candidate evaluations and advertising evaluations: An exploration. *Journal of Advertising*, 26(1), 19-29. doi: 10.1080/00913367.1997.10673515
- Redlawsk, D. P. (2002). Hot cognition or cool consideration? Testing the effects of motivated reasoning on political decision making. *The Journal of Politics*, 64(04), 1021-1044. <http://dx.doi.org/10.1111/1468-2508.00161>
- Redlawsk, D. P., Civettini, A. J., & Emmerson, K. M. (2010). The affective tipping point: Do motivated reasoners ever “get it”? *Political Psychology*, 31(4), 563-593. doi: 10.1111/j.1467-9221.2010.00772.x
- Richey, S. (2012). Campaign advertising and the stimulation and activation of the authoritarian personality. *Political Communication*, 29(1), 24-43. doi: 10.1080/10584609.2011.616874
- Ridout, T. N., & Franz, M. M. (2011). *The persuasive power of campaign advertising*. Philadelphia, PA: Temple University Press.
- Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 141-156. <http://www.jstor.org/stable/2096350>

- Rubin, M., & Hewstone, M. (1998). Social identity theory's self-esteem hypothesis: A review and some suggestions for clarification. *Personality and Social Psychology Review*, 2(1), 40-62. doi: 10.1207/s15327957pspr0201_3
- Rucker, D. D., Petty, R. E., & Briñol, P. (2008). What's in a frame anyway? A meta-cognitive analysis of the impact of one versus two sided message framing on attitude certainty. *Journal of Consumer Psychology*, 18(2), 137-149.
doi:10.1016/j.jcps.2008.01.008
- Ryan, J. B. (2011). Social networks as a shortcut to correct voting. *American Journal of Political Science*, 55(4), 753-766. doi: 10.1111/j.1540-5907.2011.00528.x
- Schemer, C. (2012). The influence of news media on stereotypic attitudes toward immigrants in a political campaign. *Journal of Communication*, 62(5), 739-757.
doi: 10.1111/j.1460-.2012.01672.x
- Schenck-Hamlin, W. J., Procter, D. E., & Rumsey, D. J. (2000). The influence of negative advertising frames on political cynicism and politician accountability. *Human Communication Research*, 26(1), 53-74. doi: 10.1111/j.1468-2958.2000.tb00749.x
- 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 . <http://psycnet.apa.org/doi/10.1037/0022-3514.51.3.515>

- Sherman, D. K., & Cohen, G. L. (2006). The psychology of self-defense: Self-affirmation theory. *Advances in Experimental Social Psychology*, 38, 183-242.
doi:10.1016/S0065-2601(06)38004-5
- Shrauger, J. S., & Rosenberg, S. E. (1970). Self-esteem and the effects of success and failure feedback on performance. *Journal of Personality*, 38(3), 404-417.
doi: 10.1111/j.1467-6494.1970.tb00018.x
- Slothuus, R., & De Vreese, C. H. (2010). Political parties, motivated reasoning, and issue framing effects. *The Journal of Politics*, 72(03), 630-645.
<http://dx.doi.org/10.1017/S002238161000006X>
- Smalley, R. L., & Stake, J. E. (1996). Evaluating sources of ego-threatening feedback: Self-esteem and narcissism effects. *Journal of Research in Personality*, 30(4), 483-495. doi:10.1006/jrpe.1996.0035
- Smith, E. R., & Henry, S. (1996). An in-group becomes part of the self: Response time evidence. *Personality and Social Psychology Bulletin*, 22(6), 635-642.
doi: 10.1177/0146167296226008
- Steele, C. M., & Liu, T. J. (1983). Dissonance processes as self-affirmation. *Journal of Personality and Social Psychology*, 45(1), 5-19. <http://dx.doi.org/10.1037/0022-3514.45.1.5>
- Stevens, D., Sullivan, J., Allen, B., & Alger, D. (2008). What's good for the goose is bad for the gander: Negative political advertising, partisanship, and turnout. *The Journal of Politics*, 70(02), 527-541.
<http://dx.doi.org/10.1017/S0022381608080481>

- Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. *Political Behavior*, 30(3), 341-366. doi: 10.1007/s11109-007-9050-9
- Stroud, N. J., & Lee, J. K. (2013). Perceptions of cable news credibility. *Mass Communication and Society*, 16(1), 67-88. doi: 10.1080/15205436.2011.646449
- Taber, C. S., Cann, D., & Kucsova, S. (2009). The motivated processing of political arguments. *Political Behavior*, 31(2), 137-155. doi: 10.1007/s11109-008-9075-8
- Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science*, 50(3), 755-769. doi: 10.1111/j.1540-5907.2006.00214.x
- Taber, C. S., & Lodge, M. (2012). The scope and generality of automatic affective biases in political thinking: Reply to the symposium. *Critical Review*, 24(2), 247-268. doi: 10.1080/08913811.2012.719664
- Tajfel, H. & Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations*. Chicago: Nelson-Hall
- Taylor, S. E., & Crocker, J. (1981). Schematic bases of social information processing. In *Social cognition: the Ontario symposium* (Vol. 1, pp. 89-134).
- Tennen, H., & Affleck, G. (1993). The puzzle of self-esteem: A clinical perspective. In R.F. Baumeister (Ed.) *Self-esteem: The puzzle of low self-regard*, (241-262). New York: Plenum Press.

- Tetlock, P. E., & Kim, J. I. (1987). Accountability and judgment processes in a personality prediction task. *Journal of personality and social psychology*, 52(4), 700-709. <http://psycnet.apa.org/doi/10.1037/0022-3514.52.4.700>
- van Prooijen, J. W., Krouwel, A. P., Boiten, M., & Eendebak, L. (2015). Fear among the extremes. How political ideology predicts negative emotions and outgroup derogation. *Personality and Social Psychology Bulletin*, 0146167215569706.
- Wattenberg, M. P., & Brians, C. L. (1999). Negative campaign advertising: Demobilizer or mobilizer? *American Political Science Review*, 93(04), 891-899. <http://dx.doi.org/10.2307/2586119>
- Weeks, B. E., & Garrett, R. K. (2014). Electoral consequences of political rumors: Motivated reasoning, candidate rumors, and vote choice during the 2008 US presidential election. *International Journal of Public Opinion Research*, 26(4), 401-422. doi: 10.1093/ijpor/edu005
- Weinstein, N. D. (1982). Unrealistic optimism about susceptibility to health problems. *Journal of Behavioral Medicine*, 5(4), 441-460. doi: 10.1007/BF00845372
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, 90(2), 245-271. <http://dx.doi.org/10.1037/0033-2909.90.2.245>

Appendix A

Experiment One, Pilot Test 1: Original Stimuli Affirmatory, Republican Sponsor (front and back).

Every politician inherits challenges. Few have faced so many.

- ◆ Everyday families making ends meet
 - ◆ Our heroes coming home
 - ◆ Assembly lines humming again

Key legislation by Steven Morris and the Democratic party has **supported** our state and country.

But despite these good things, Steven Morris has failed to address key problems facing our state

- ◆ 8% of Americans facing unemployment
- ◆ Uncontrolled deficit spending
- ◆ Harsh proposed gun legislation



Steven Morris has done his best, but his best isn't good enough.

VOTE
David Sanders
★★★
Republican
for Congress

Non-affirmatory, Republican sponsor (Front and back)

Every politician inherits challenges. Few have faced so many.

- ◆ Everyday families failing to make ends meet
 - ◆ Our heroes still abroad
 - ◆ Assembly lines shut down

Key legislation by Steven Morris and the Democratic party has **failed** our state and country.

Steven Morris has failed to address key problems facing our state

- ◆ 8% of Americans facing unemployment
- ◆ Uncontrolled deficit spending
- ◆ Harsh proposed gun legislation



If this is Steven Morris' best, his best isn't good enough.

VOTE
David Sanders
★★★
Republican
for Congress

Affirmatory, Democratic sponsor (front and back)

Every politician inherits challenges. Few have faced so many.

- ◆ Everyday families making ends meet
 - ◆ Our heroes coming home
 - ◆ Assembly lines humming again

Key legislation by Steven Morris and the Republican party has **supported** our state and country.

But despite these good things, Steven Morris has failed to address key problems facing our state

- ◆ Massive cuts to welfare programs
- ◆ Harsh proposed abortion laws
- ◆ Tax breaks for big business



Steven Morris has done his best, but his best isn't good enough.

VOTE
David Sanders
★★★
Democrat
for Congress

Non-affirmatory, Democratic sponsor (front and back)

Every politician inherits challenges. Few have faced so many.

- ◆ Everyday families failing to make ends meet
 - ◆ Our heroes still abroad
 - ◆ Assembly lines shut down

Key legislation by Steven Morris and the Republican party has **failed** our state and country.

Steven Morris has failed to address key problems facing our state

- ◆ Massive cuts to welfare programs
- ◆ Harsh proposed abortion laws
- ◆ Tax breaks for big business



If this is Steven Morris' best, his best isn't good enough.

VOTE

David Sanders

★★★

Democrat

for Congress

Appendix B

Experiment One, Pilot Test Questionnaire (same for all three pilot tests) Comprehension

Which of the following do you believe is the best description of the information in the ad you just viewed?

- This advertisement contained only negative statements about the subject of the ad, Steven Morris
- This advertisement contained only positive statements about the subject of the ad, Steven Morris
- This advertisement contained both positive and negative statements about the subject of the ad, Steven Morris
- None of the above are true

The politician who created this ad, David Sanders, is most likely a:

- Democrat
- Republican
- Independent
- Don't know

How confident are you in your assessment of David Sanders' political party?

- Not at all confident
- Not too confident
- Somewhat confident
- Very confident
- Extremely confident

The politician who was the subject of this ad, Steven Morris, is most likely a:

- Democrat
- Republican
- Independent
- Don't know

How confident are you in your assessment of Steven Morris' political party?

- Not at all confident
- Not too confident
- Somewhat confident
- Very confident
- Extremely confident

Perceived similarity

How similar was the advertisement you just saw to other political ads you have seen in the past?

- Not at all similar
- Not too similar
- Somewhat similar
- Very similar
- Extremely similar

Party identification

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?

- Democrat
- Republican
- Independent
- Other
- I prefer not to answer

(IF ANSWERS INDEPENDENT)

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

- Yes, Democratic
- Yes, Republican
- No, Neither

(IF ANSWERS DEMOCRAT)

Would you call yourself a strong Democrat or a not very strong Democrat?

- Strong
- Not very strong

When talking about Democrats, how often do you use "we" instead of "they"?

- Most of the time
- Some of the time
- Rarely
- Never

To what extent do you think of yourself as being a Democrat?

- A great deal
- Somewhat
- Very little
- Not at all

How important is being a Democrat to you?

- Extremely important
- Very important
- Not very important
- Not important at all

How well does the term Democrat describe you?

- Extremely well
- Very well
- Not very well
- Not at all

(IF ANSWERS REPUBLICAN)

Would you call yourself a strong Republican or a not very strong Republican?

- Strong
- Not very strong

How important is being a Republican to you?

- Extremely important
- Very important
- Not very important
- Not important at all

How well does the term Republican describe you?

- Extremely well
- Very well
- Not very well
- Not at all

When talking about Republicans, how often do you use “we” instead of “they”?

- Most of the time
- Some of the time
- Rarely
- Never

To what extent do you think of yourself as being a Republican?

- A great deal
- Somewhat
- Very little
- Not at all

Appendix C

Experiment One, Final Stimuli

Affirmatory, Democratic Sponsor (front and back)

Every politician inherits challenges. Few have faced so many.

- ◆ Everyday families making ends meet
- ◆ Our heroes coming home
- ◆ Assembly lines humming again

Key legislation by Steven Morris and the Republican party has **supported** our state and country.

But despite these good things, Steven Morris has failed to address key problems facing our state

- ◆ Massive cuts to welfare programs
- ◆ Harsh proposed abortion laws
- ◆ Tax breaks for big business



Steven Morris has done his best, but his best isn't good enough.

VOTE

David Sanders

Democrat

for Congress

Affirmatory, Republican Sponsor (front and back).

Every politician inherits challenges. Few have faced so many.

- ◆ Everyday families making ends meet
 - ◆ Our heroes coming home
 - ◆ Assembly lines humming again

Key legislation by Steven Morris and the Democratic party has **supported** our state and country.

But despite these good things, Steven Morris has failed to address key problems facing our state

- ◆ 8% of Americans facing unemployment
- ◆ Uncontrolled deficit spending
- ◆ Harsh proposed gun legislation



Steven Morris has done his best, but his best isn't good enough.

VOTE
David Sanders
★★★
Republican
for Congress

Non-affirmatory, Republican sponsor (Front and back)

Every politician inherits challenges. Few have faced so many.

- ◆ Everyday families failing to make ends meet
- ◆ Our heroes still abroad
- ◆ Assembly lines shut down

Key legislation by Steven Morris and the Democratic party has **failed** our state and country.

Steven Morris has failed to address key problems facing our state

- ◆ 8% of Americans facing unemployment
- ◆ Uncontrolled deficit spending
- ◆ Harsh proposed gun legislation



If this is Steven Morris' best, his best isn't good enough.

VOTE
David Sanders
★★★
Republican
for Congress

Non-affirmatory, Democratic Sponsor (Front and back)

Every politician inherits challenges. Few have faced so many.

- ◆ Small businesses not making ends meet
 - ◆ Failure to protect America at home and abroad
 - ◆ Stock market recovering sluggishly

Key legislation by Steven Morris and the Republican party has **failed** our state and country.

Steven Morris has failed to address key problems facing our state

- ◆ Massive cuts to welfare programs
- ◆ Harsh proposed abortion laws
- ◆ Tax breaks for big business



If this is Steven Morris' best, his best isn't good enough.

VOTE
David Sanders

Democrat
for Congress

Appendix D

Candidate Biographies and Full Issue Positions

Candidate Biographies

Note. Candidate names were changed based on the political party affiliation of the candidates in each condition.

Republican Introduction Article:

David Sanders was born in 1965, the son of a coal miner father and a nurse mother. To this day, he still lives in the house where he was born.

Growing up in a close-knit family of modest means, David and his five siblings learned early in life the importance of hard work and responsibility. During his youth, he worked in a variety of jobs - on farms and construction sites, as a paper boy and at a bottling plant.

After graduating from high school, he attended Iowa State University, earning a degree in government and economics. In 1992, David graduated from Catholic University of America Law School in Washington, D.C. and was elected to the US House of Representatives in 2000, after practicing law for eight years.

Sanders serves on the House Judiciary Committee, where he works for a competitive marketplace with fewer regulations on business, for less government expenditure on entitlement programs, and for legal immigration that will help America's economy grow, while still making sure borders remain secure. Additionally, he has promised to fight any legislation that attempts to curb gun rights for Americans.

Sanders' proven record of leadership and accountability makes him a natural candidate for combatting the current gridlock in Washington. His blunt pragmatism and honest integrity provide his constituents with guaranteed results, not just empty platitudes (222 words)

Democrat Introduction Article

Senator Morris has earned a reputation for keeping in touch with the people he represents and in Washington for standing up for common sense and holding government accountable.

Steven Morris does his job with a work ethic that can be traced to the farm where he grew up and still lives today, and to his days as a young father of five who worked three jobs. The son of a welder and a domestic worker, he earned his law degree from Harvard University. He then began his rise in the legal world, before turning to politics in 2000.

In Washington, Senator Morris has been a leader in shaping legislation to improve the quality of life for Americans and to expand the economic opportunities for individuals, families and communities.

Morris serves on the Senate Committee on the Judiciary, where he works for more oversight on Wall Street, for timely implementation of the Affordable Care Act, and for an expedited path to citizenship that will help America's economy grow. Additionally, he has promised to fight any legislation that attempts to abortion rights as outlined by Roe v. Wade.

Steven Morris' time-tested blend of pragmatism and integrity gives him a license simply to tell it like it is. He brings a refreshing, no-nonsense style that displaces Washington nonsense with substance. Morris' creed of ethics and accountability provide strong and effective leadership. (228 words).

Candidate issue positions

Health care: Republican stance

Americans everywhere have expressed their concern about health care costs spiraling out-of-control. The President's new health care law will drive costs up, bankrupt the country and create bureaucracy when it comes to everyday health care decisions. However, lowering health care costs is essential to growing our economy and creating jobs in our country. Senator Sanders believes we need to take simple, common sense actions, including allowing individuals to purchase health insurance across state lines, encouraging small businesses to band together to form Association Health Plans, giving individuals the same tax breaks given to businesses, enhancing Health Savings Accounts, pursuing medical malpractice reform and adopting a sensible program to cover those with pre-existing conditions. (113 words)

Spending: Republican stance

Americans are concerned about the out-of-control debt levels in Washington. Senator Sanders has made a commitment to Americans to tackle this debt problem. To start cutting our spending and reduce the deficit, Senator Sanders believes that we must immediately freeze non-defense, non-veterans spending at 2008 spending levels. Additionally, we must reform entitlement programs. Social Security, Medicare and Medicaid are going broke and will bankrupt our country. Benefits for those currently receiving them or those approaching retirement will not change. But for those who are younger, the programs will need to change. Senator Sanders is willing to confront this reality and to come up with common-sense solutions that will safeguard our future. (111 words)

Abortion: Republican stance

Senator Sanders believes in the sanctity of human life and affirms that the unborn child has a fundamental individual right to life, which cannot be infringed. He opposes using public funds to promote or perform abortion or fund organizations that perform or advocate it and will not fund health care that includes abortion coverage. Senator Sanders' goal is to ensure that women with problem pregnancies have the kind of support they need for themselves and for their babies, not to be punitive towards those for whose difficult situation he has only compassion. Senator Sanders' opposes abortion, but his pro-life agenda does not include punitive action against women who have an abortion. (111 words).

Jobs: Republican stance

With the help of Senate Republican colleagues, Senator Sanders developed the Senate Republican Jobs Plan, a blueprint to create private sector growth and strengthen the economy. Families and small businesses are weighed down by record debt and deficit, high taxes, burdensome regulations, and a costly health care plan that raises costs and reduces coverage. This approach by Washington adds uncertainty for investors and costs for job creators. This plan puts America on a path to an environment where families and small businesses can succeed. The plan focuses on budget, tax, regulatory, workforce, trade, energy, and health care proposals that form the basis of a pro-growth plan to turn the economy around. (111 words).

Health care: Democratic stance

As a doctor, Senator Sanders believes that access to health care is a fundamental right. To address escalating health care spending, Congress passed and the President signed into law health care reform legislation - the Patient Protection and Affordable Care Act and Senator Sanders supports this legislation. This bill will help reduce health care costs, allow adults children to stay on their parent's insurance until age 26, make prescription drugs more affordable for seniors, and start us on the road to increased quality, lower-cost care. Additionally, this plan ensures that individuals with pre-existing conditions, those who most need insurance, are offered good insurance at a price that is affordable (109 words).

Spending: Democratic stance

Senator Sanders believes the growing national debt is a huge danger to our children's future. He thinks the federal government needs to eliminate wasteful spending and return to the sound fiscal practices that produced budget surpluses in the 1990s. Senator Sanders is concerned about the size of the federal budget and thinks we need to stop rapid spending growth. However, he recognizes it is difficult to make a real impact on the deficit by focusing solely on non-defense discretionary spending. Such spending makes up less than 20 percent of the federal budget. Addressing the debt will require

comprehensive reform, including defense spending as well as discretionary and entitlement spending (109 words).

Gun Control: Democratic stance

Senator Sanders supports a ban on owning assault rifles in the United States. Americans have the right to own a gun to protect our homes and families. However, assault weapons are not necessary to defend yourself or your property. Assault weapons have one purpose and one purpose only: to rapidly kill a large number of people. The wish to arm ourselves against the police who keep our streets safe is not a reason to oppose an assault weapons ban. Senator Sanders believes that as Americans, we have a right to arm ourselves against criminals, but saving the lives of police officers and innocent civilians is more important than preventing imagined tyranny (111 words).

Jobs: Democratic stance

Americans believe in hard work, fair play, and personal responsibility. But too many hard-working Americans now struggle to make ends meet - squeezed by unemployment, soaring home mortgage payments, escalating gas prices, and mounting bills for child care and college tuition. Senator Sanders will continue to focus on protecting Main Street. In the time since the financial crisis began, millions of Americans have lost their jobs, homes, and retirement savings. It is simply not enough to say that Wall Street banks have been stabilized. Senator Sanders believes that we must enact the necessary safeguards to protect our economy and bring accountability back to our financial system (106 words).

Appendix E

Experiment One Questionnaire

Zip code

Thank you for agreeing to participate in this study. In this study, you will be asked to read political information about two candidates who will be running for Congress in your district in the next election. The candidates are real candidates, although the names have been changed. By entering your zip code below, you will be matched with candidates that may appear on your ballot in 2014. Please enter your zip code to be matched with candidates who may appear on your ballot.

Attention Check

Before we proceed, we have a question about how you're feeling. Recent research suggests that choices are affected by context. Differences in how people feel can affect their choices. To help us understand how people understand political information, we are interested in information about you. Specifically, we are interested in whether you actually take time to read directions. To show you have read the instructions, please ignore the question below about how you are feeling and instead check only "none of the above" option as your answer. Thank you very much. Please check all the words that currently describe how you are feeling.

- Interested
- Distressed
- Excited
- Upset
- Strong
- Guilty
- Scared
- Hostile
- Enthusiastic
- Proud
- Irritable
- Alert
- Ashamed
- Inspired
- Nervous
- Determined
- Attentive
- Jittery
- None of the above

CANDIDATE BACKGROUNDS

Manipulation check

Q1. David Sanders is a:

- Republican
- Democrat
- Independent

Q2. Steven Morris is a:

- Republican
- Democrat
- Independent

STIMULI: POLITICAL ADVERTISEMENT

Counter-arguing

We are now interested in what you were thinking about while reading the political ad. Any idea or thought is fine, simply list what it was that you were thinking while reading the political ad for David Sanders. You should try to record only those ideas that you were thinking while reading the political ads. Please write only one idea in each box provided below. We have deliberately provided more space than most people will need, so don't worry if you do not fill every space. Just write down whatever your thoughts were during the message. Please be completely honest.

Which of the following best characterizes this thought? (Thought 1)

- This is a thought about Steven Morris
- This is a thought about David Sanders
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is:

- Positive
- Negative
- Neither positive nor negative

Which of the following best characterizes this thought? (Thought 2)

- This is a thought about Steven Morris
- This is a thought about David Sanders
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is:

- Positive
- Negative
- Neither positive nor negative

Which of the following best characterizes this thought? (Thought 3)

- This is a thought about Steven Morris
- This is a thought about David Sanders
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is:

- Positive
- Negative
- Neither positive nor negative

Which of the following best characterizes this thought? (Thought 4)

- This is a thought about Steven Morris
- This is a thought about David Sanders
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is:

- Positive
- Negative
- Neither positive nor negative

Which of the following best characterizes this thought? (Thought 5)

- This is a thought about Steven Morris
- This is a thought about David Sanders
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is:

- Positive
- Negative
- Neither positive nor negative

Expectancy disconfirmation

Did you find the content of this ad to be surprising or unsurprising?

- Surprising
- Unsurprising

How surprising was the ad?

- Slightly surprising
- Somewhat surprising
- Very surprising

OR

How unsurprising was the ad?

- Slightly unsurprising
- Somewhat unsurprising
- Very unsurprising

Did you find the content of the political advertisement to be expected or unexpected?

- Expected
- Unexpected

How expected was the content of the political ad?

- Slightly expected
- Somewhat expected
- Very expected

OR

How unexpected was the content of the political ad?

- Slightly unexpected
- Somewhat unexpected
- Very unexpected

Was this political ad you saw similar or dissimilar to political advertisements you have seen in the past?

- Similar
- Dissimilar

How similar was the political ad you saw to political ads you have seen in the past?

- Slightly similar
- Somewhat similar
- Very similar

OR

How dissimilar was the political ad you saw to political ads you have seen in the past?

- Slightly dissimilar
- Somewhat dissimilar
- Very dissimilar

Attitudes and vote intention

How likable is David Sanders?

- Not at all likable
- Not too likable
- Somewhat likable
- Very likable
- Extremely likable

How likable is Steven Morris?

- Not at all likable
- Not too likable
- Somewhat likable
- Very likable
- Extremely likable

Please answer the following questions

	Not at all likely	Not too likely	Somewhat likely	Very likely	Extremely likely
How likely would you be to vote for David Sanders?	<input type="radio"/>				
How likely would you be to vote for Steven Morris?	<input type="radio"/>				
How likely would be to participate in a political event (other than voting) for David Sanders?	<input type="radio"/>				
How likely would you be to participate in a political event (other than voting) for Steven Morris	<input type="radio"/>				

Source Credibility (randomized presentation)

Please rate David Sanders on the following characteristics:

Honest	1	2	3	4	5	6	7	Dishonest
Untrustworthy	1	2	3	4	5	6	7	Trustworthy
Honorable	1	2	3	4	5	6	7	Dishonorable
Moral	1	2	3	4	5	6	7	Immoral
Unethical	1	2	3	4	5	6	7	Ethical
Phony	1	2	3	4	5	6	7	Genuine
Intelligent	1	2	3	4	5	6	7	Unintelligent
Untrained	1	2	3	4	5	6	7	Trained
Inexpert	1	2	3	4	5	6	7	Expert
Informed	1	2	3	4	5	6	7	Uninformed
Competent	1	2	3	4	5	6	7	Incompetent
Stupid	1	2	3	4	5	6	7	Bright
Cares about me	1	2	3	4	5	6	7	Doesn't care about me
Has my best interests at heart	1	2	3	4	5	6	7	Doesn't have my best interests at heart
Self-centered	1	2	3	4	5	6	7	Not self-centered
Concerned with me	1	2	3	4	5	6	7	Unconcerned with me
Insensitive	1	2	3	4	5	6	7	Sensitive
Not understanding	1	2	3	4	5	6	7	Understanding

Please rate Steven Morris on the following characteristics.

Honest	1	2	3	4	5	6	7	Dishonest
Untrustworthy	1	2	3	4	5	6	7	Trustworthy
Honorable	1	2	3	4	5	6	7	Dishonorable
Moral	1	2	3	4	5	6	7	Immoral
Unethical	1	2	3	4	5	6	7	Ethical
Phony	1	2	3	4	5	6	7	Genuine
Intelligent	1	2	3	4	5	6	7	Unintelligent
Untrained	1	2	3	4	5	6	7	Trained
Inexpert	1	2	3	4	5	6	7	Expert
Informed	1	2	3	4	5	6	7	Uninformed
Competent	1	2	3	4	5	6	7	Incompetent
Stupid	1	2	3	4	5	6	7	Bright
Cares about me	1	2	3	4	5	6	7	Doesn't care about me
Has my best interests at heart	1	2	3	4	5	6	7	Doesn't have my best interests at heart
Self-centered	1	2	3	4	5	6	7	Not self-centered

Concerned with me	1	2	3	4	5	6	7	Unconcerned with me
Insensitive	1	2	3	4	5	6	7	Sensitive
Not understanding	1	2	3	4	5	6	7	Understanding

Feeling thermometer

We'd like to get your feelings toward some of our political leaders and groups. Please rate each of these people or groups on something we call the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the person or group. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person or group and that you don't care too much for that person or group. You would rate them at the 50 degree mark if you don't feel particularly warm or cold toward the person or group.

- _____ David Sanders
- _____ Steven Morris
- _____ Barack Obama
- _____ John Boehner
- _____ Republicans
- _____ Democrats
- _____ Congress

Outgroup derogation

Please indicate how much you agree or disagree with the following statements:

Response scale:

Strongly	Somewhat	Slightly	Slightly	Somewhat	Strongly
Disagree	Disagree	Disagree	Agree	Agree	Agree
0	0	0	0	0	0

- Most Democrats have America's best interests at heart.
- Most Republicans have America's best interests at heart.
- Most Democrats are reasonable, thoughtful voters.
- Most Republicans are reasonable, thoughtful voters.
- Most Democrats believe in the politicians they support.
- Most Republicans believe in the politicians they support.
- Most Democrats are trying to destroy our country.
- Most Republicans are trying to destroy our country.

Party identification

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent or what?

- Democrat
- Republican
- Independent
- Other
- Prefer not to answer

If Independent is selected: Do you think of yourself as closer to the Republican Party or the Democratic Party?

- Yes, Republican
- Yes, Democratic
- No, Neither

If Democrat is selected:

Would you call yourself a strong Democrat or a not very strong Democrat?

- Strong
- Not very strong

How important is being a Democrat to you?

- Not important at all
- Not very important
- Very important
- Extremely important

How well does the term Democrat describe you?

- Not at all
- Not very well
- Very well
- Extremely well

When talking about Democrats, how often do you use "we" instead of "they"?

- Never
- Rarely
- Some of the time
- Most of the time

To what extent do you think of yourself as being a Democrat?

- Not at all
- Very little
- Somewhat

- A great deal

If Republican is selected:

Would you call yourself a strong Republican or a not very strong Republican?

- Strong
- Not very strong

How important is being a Republican to you?

- Not important at all
- Not very important
- Very important
- Extremely important

How well does the term Republican describe you?

- Not at all
- Not very well
- Very well
- Extremely well

When talking about Republicans, how often do you use "we" instead of "they"?

- Never
- Rarely
- Some of the time
- Most of the time

To what extent do you think of yourself as being a Republican?

- Not at all
- Very little
- Somewhat
- A great deal

Political knowledge

Please answer the following questions to the best of your knowledge.

How much of a majority is required for the U.S. Senate and House to override a presidential veto?

- 1/2
- 3/5
- 2/3
- 3/4

How long is the term of office for a United States senator?

- 2 years
- 3 years
- 4 years
- 5 years
- 6 years

What country is America's largest trading partner, that is, with what country the United States conducts the greatest amount of foreign trade?

- China
- France
- Canada
- Germany
- Mexico

What is the federal minimum wage right now?

- \$5.75
- \$6.50
- \$7.25
- \$8.00
- There is no federal minimum wage, states set the minimum wage

Who is the current United States attorney general?

- Hillary Clinton
- John Kerry
- Eric Holder
- John Roberts

Self-esteem

Please indicate how much you agree or disagree with the following statements:

Note. Only shown to self-identified Democrats/Republicans

Response option

Strongly	Somewhat	Slightly	Slightly	Somewhat	Strongly
Disagree	Disagree	Disagree	Agree	Agree	Agree
0	0	0	0	0	0

I regret that I belong to the Democratic (Republican) party

I am glad to be a member of the Democratic (Republican) party

I feel that the Democratic (Republican) party is not worthwhile

I feel good about belonging to the Democratic (Republican) party

Political cynicism

Response option:

Strongly Disagree	Somewhat Disagree	Slightly Disagree	Slightly Agree	Somewhat Agree	Strongly Agree
0	0	0	0	0	0

Most politicians do not consciously promise more than they can deliver.

Politicians are primarily self-interested.

In enabling someone to become a member of Congress, friends are more important than abilities.

Political parties are only interest in my vote, not my opinion.

Politicians do not understand what matters to society.

Politicians are capable of solving important problems.

Most politicians are competent people who know what they are doing.

Manipulation check

Think back to the political advertisement you saw. Which of the following best describes the content of the political ad?

- This advertisement contained only negative statements about the subject of the ad, Steven Morris
- This advertisement contained only positive statements about the subject of the ad, Steven Morris
- This advertisement contained both positive and negative statements about the subject of the ad, Steven Morris
- None of the above are true

Demographics

What age did you turn on your most recent birthday?

What is your sex?

- Male
- Female

Please indicate the highest level of education you have obtained.

- Grade school
- Some high school
- High school diploma or GED
- Some college
- Associate's degree
- Bachelor's degree
- Master's Degree
- Advanced degree (Ph.D., DPHIL, J.D., M.D., DDS, etc.)

Please indicate the income range that best describes your total household income.

- Under \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$100,000
- Over \$100,000

What racial or ethnic group or groups best describes you?

- Black
- Asian
- Native American
- Hispanic or Latino
- White
- Other (please specify)

Appendix F

Experiment Two, Pilot One Questionnaire (Issue Attitude Positions)

Defense spending

Some people believe that we should spend less money for defense. Others feel that defense spending should be greatly increased. Which viewpoint is closer to your opinion?

- Defense spending should be decreased
- Defense spending should be increased

How strong are your feelings on the issue of defense spending?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of defense spending?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of defense spending to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Urban unrest

There is much discussion about the best way to deal with urban unrest and rioting. Some say it is more important to use all available force to maintain law and order. Others say it is more important to correct the problems of poverty and unemployment that give rise to these disturbances. Which option is closer to your opinion?

- Use all available force
- Solve problems of poverty/unemployment

How strong are your feelings on the issue of urban unrest?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of urban unrest?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of urban unrest to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Hate speech

Recently there has been a lot of discussion about hate speech. Hate speech is defined as "speech that attacks, threatens or insults a person or a group on the basis of national origin, ethnicity, color, religion, gender, gender identity, sexual orientation or disability." Some people believe that hate speech is not considered protected speech under the First Amendment and that those who engage in hate speech should be prosecuted. Others feel that hate speech, while unpleasant, must be protected because of free speech laws. Which view is close to your opinion?

- Hate speech should be protected
- Hate speech should be prosecuted

How strong are your feelings on the issue of hate speech?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of hate speech?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of hate speech to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Legalizing marijuana

Some people believe that marijuana should be legalized, similarly to alcohol. Others believe that marijuana serves as a "gateway drug" and should not be legalized. Which is closer to your opinion?

- Marijuana should be legalized
- Marijuana should remain illegal

How strong are your feelings on the issue of marijuana legalization?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of marijuana legalization?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of marijuana legalization to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Privacy and national security

As part of its efforts to investigate terrorism, a federal government agency obtained records from larger US telephone and Internet companies in order to compile telephone call logs and Internet communications. Some people believe that this program should be continued and expanded, while others believe that this program should be discontinued and disbanded. Which is closer to your opinion?

- The program should be continued
- The program should be disbanded

How strong are your feelings on the issue of privacy and national security?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of privacy and national security?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of privacy and national security to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Fracking

Do you support or oppose the increased use of fracking to extract oil and natural gas from underground rock formations?

- Support increased fracking
- Oppose increased fracking

How strong are your feelings on the issue of fracking?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of fracking?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of fracking to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Cybersecurity

Recently, there has been a lot of talk about the security of personal information. Some people believe that the government should do more to regulate what advertisers do with consumers' personal information, while other people believe that the government should not get involved in this issue. Which is closer to your opinion?

- Government should do more to regulate what advertisers can do with personal information
- Government should not get involved in this issue

How strong are your feelings on the issue of cybersecurity?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of cybersecurity?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of cybersecurity to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Euthanasia

When a person has a disease that cannot be cured, do you think doctors should be allowed by law to end the patient's life by some painless means if the patient and his or her family request it?

- Should not be allowed
- Should be allowed

How strong are your feelings on the issue of euthanasia?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of euthanasia?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of euthanasia to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Social security

Assuming there would be no change in Social Security benefits for those who are currently 55 or older, do you think it is a good idea or bad idea to address concerns with the Social Security system by increasing the age at which people are eligible to receive Social Security benefits?

- Good idea
- Bad idea

How strong are your feelings on the issue of Social Security?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of Social Security?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of Social Security to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Gun rights

Some people believe that it is more important to be able to control gun ownership while other people believe that it is more important to protect the right of Americans to own guns. Which is closer to your opinion?

- More important to control gun ownership
- More important to protect the right to own guns

How strong are your feelings on the issue of gun rights?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of gun rights?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of gun rights to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Immigration

If you had to choose, what should be the main focus of the U.S. government in dealing with the issue of illegal immigration: developing a plan for halting the flow of illegal immigrants into the U.S. or developing a plan to deal with immigrants who are currently in the U.S. illegally?

- Developing a plan to halt the flow of illegal immigrants
- Developing a plan to deal with immigrants who are currently here illegally

How strong are your feelings on the issue of immigration?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of immigration?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of immigration to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Abortion

Some people believe that abortion should be legal in most circumstances while others believe that abortion should be illegal in most cases. Which is closer to your opinion?

- Abortion should be legal in most cases
- Abortion should be illegal in most cases

How strong are your feelings on the issue of abortion?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of abortion?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of abortion to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Minimum wage

Would you support a bill that would raise the federal minimum wage to \$9 an hour?

- Would support
- Would not support

How strong are your feelings on the issue of minimum wage?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of minimum wage?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of minimum wage to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Environmental regulation

Would you favor or oppose a bill that would set higher emissions and pollution standards for business and industry?

- Favor
- Oppose

How strong are your feelings on the issue of environmental regulation?

- Not at all strong
- Not very strong
- Somewhat strong
- Very strong
- Extremely strong

How certain are you of your feelings on the issue of environmental regulation?

- Not at all certain
- Not very certain
- Somewhat certain
- Very certain
- Extremely certain

How important is the issue of environmental regulation to you personally?

- Not at all important
- Not very important
- Somewhat important
- Very important
- Extremely important

Party identification

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent or what?

- Republican
- Democrat
- Independent
- Other (please specify) _____

Would you call yourself a strong Republican or a not very strong Republican?

- Strong
- Not very strong

Would you call yourself a strong Democrat or a not very strong Democrat?

- Strong
- Not very strong

Do you think of yourself as closer to the Republican party or the Democratic party?

- Yes, Democratic
- Yes, Republican
- No, Neither

Self-esteem scale one

Please indicate how much you agree or disagree with the following statements.

Response options:

- Not at all
- A little bit
- Somewhat
- Very much
- Extremely

I believe that my political party has little to be proud of
 I feel good about my political party identification
 I have little respect for my political party
 I do not mind telling people my political party identification

Self-esteem scale two

Please answer the following questions

Response options:

- Not at all
- A little bit
- Somewhat
- Very much
- Extremely

I feel confident about my abilities
 I am worried about whether I am regarded as a success or failure
 I feel satisfied with the way my body looks right now
 I feel frustrated or rattled about performance.
 I feel that I have trouble understanding things that I read
 I feel that others respect and admire me
 I am dissatisfied with my weight
 I feel self-conscious
 I feel as smart as others
 I feel displeased with myself
 I feel good about myself
 I am pleased with my appearance right now
 I am worried about what other people think of me
 I feel confident that I understand things
 I feel inferior to others at this moment
 I feel unattractive
 I feel concerned about the impression I am making
 I feel that I have less scholastic ability right now than others
 I feel like I'm not doing well
 I am worried about looking foolish

Demographics

What age did you turn on your most recent birthday?

With which gender do you mainly identify?

- Male
- Female

Which of the following represents the highest level of education you have obtained?

- Grade school
- Some high school
- High school diploma or equivalent (i.e. GED)
- Some college
- Associate's degree
- Bachelor's degree
- Master's degree
- Advanced terminal degree (Ph.D., DPHIL, J.D., M.D., etc.)

Please indicate your take home income from last year.

- Under \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$100,000
- Over \$100,000

Which racial or ethnic group or groups best describes you?

- Black
- Asian
- Native American
- Hispanic or Latino
- White
- Other (please specify) _____

Political ideology

Here is a 7-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale, or haven't you thought much about this?

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate/Middle of the road
- Slightly conservative

- Conservative
- Extremely conservative
- Have not thought much about this

Appendix G

Experiment Two, Stimuli Pilot One: Stimuli

Gun rights can be confusing...



❖ **Who can legally own a firearm?**



❖ **What does the second amendment say about gun rights?**

Congress has proposed a new plan that would require universal background checks for gun purchases

Greg Ellison opposes this proposal

Gun Rights Oppose Front

Greg Ellison's View

There are good reasons to not support this proposal:

- ❖ **Creates a backdoor gun registry**
Requiring universal background checks essentially establishes a gun registry, as store owners are required to keep records of private sales
- ❖ **Second Amendment violation**
Universal background checks creates unconstitutional and unnecessary hurdles for law-abiding gun owners



Additionally, this proposal fails to solve key problems:

- ❖ **Criminals don't submit to background checks**
Instituting universal background checks won't keep guns out of the hands of criminals intent on causing violence
- ❖ **New legislation is unnecessary**
Prosecution of current gun laws would be more effective at reducing gun crimes than the proposed legislation

America cannot afford this change. Vote Greg Ellison for Congress.

Gun Rights Oppose Non-affirmatory

Greg Ellison's View

There are benefits to this proposal:

- ❖ **Eliminates the private seller loophole**
Universal background checks would require private sellers to perform background checks before selling a gun.
- ❖ **Regulates online sales**
Online sellers are currently exempt from performing background checks. Universal background checks would hinder individuals from illegally obtaining guns online.



However, this proposal fails to solve key problems:

- ❖ **Criminals don't submit to background checks**
Instituting universal background checks won't keep guns out of the hands of criminals intent on causing violence
- ❖ **New legislation is unnecessary**
Prosecution of current gun laws would be more effective at reducing gun crimes than the proposed legislation

America cannot afford this change. Vote Greg Ellison for Congress.

Gun Rights Oppose Affirmatory

Gun rights can be confusing...



❖ **Who can legally own a firearm?**



❖ **What does the second amendment say about gun rights?**

Congress has proposed a new plan that would require universal background checks for gun purchases

Greg Ellison supports this proposal

Gun Rights Support Front

Greg Ellison's View

There are good reasons for this change:

- ❖ **Eliminates the private seller loophole**
Universal background checks would require private sellers to perform background checks before selling a gun.
- ❖ **Regulates online sales**
Online sellers are currently exempt from performing background checks. Universal background checks would hinder individuals from illegally obtaining guns online.



Additionally, this proposal addresses key problems:

- ❖ **Aids in prosecution of gun-related crimes**
Instituting universal background checks would aid legislators in prosecuting current and preventing future gun-related crimes

- ❖ **Decreases criminal gun access**
Universal background checks would make it much harder for criminals to illegally access weapons through private sellers.

America cannot afford to do nothing. Vote Greg Ellison for Congress.

Gun Rights Support Non-affirmatory

Greg Ellison's View

There are downsides to this proposal:

- ❖ **Criminals don't submit to background checks**
Instituting universal background checks won't keep guns out of the hands of criminals intent on causing violence
- ❖ **Creates a backdoor gun registry**
Requiring universal background checks essentially establishes a gun registry, as store owners are required to keep records of private sales



However, this proposal addresses key problems:

- ❖ **Eliminates the private seller loophole**
Universal background checks would require private sellers to perform background checks before selling a gun.

- ❖ **Regulates online sales**
Online sellers are currently exempt from performing background checks. Universal background checks would hinder individuals from illegally obtaining guns online.

America cannot afford to do nothing. Vote Greg Ellison for Congress.

Gun Rights Support Affirmatory

Social Security can be confusing...



❖ **When can I retire?**

❖ **Will I get to keep my benefits?**



Congress has proposed a new plan that would raise the retirement age to 68.

Greg Ellison opposes this proposal

Social Security Oppose Front

Greg Ellison's View

There are good reasons not to change:

- ❖ **Older employees face age discrimination**
Older employees may face discrimination from employers that prefer to higher younger employees with newer skills.
- ❖ **Working-class Americans would be hurt**
The life-expectancy of low income workers has not improved. Raising the retirement age to 68 will disproportionately burden the lower classes.



Additionally, this proposal creates other problems:

- ❖ **Benefits get cut**
Raising retirement age constitute a benefit cut. When the age was raised from 65 to 67, workers of all ages saw a 13% cut in benefits over their lifetime.

- ❖ **It would burden disability**
Raising the retirement age would force more seniors to turn to disability rather than retirement, increasing government expenditures on this program

America cannot afford this change. Vote Greg Ellison for Congress.

Social Security Oppose Non-affirmatory

Greg Ellison's View

There are benefits to this proposal:

- ❖ **Delaying retirement leads to greater wealth**
Every year that individuals spend working increases their own personal wealth. Increasing the retirement age would allow seniors to have greater retirement income.
- ❖ **More working Americans = Healthier Economy**
*Boosting the retirement age would add \$30 trillion dollars to the economy over 30 years**



However, this proposal creates problems:

- ❖ **Benefits get cut**
Raising retirement age constitute a benefit cut. When the age was raised from 65 to 67, workers of all ages saw a 13% cut in benefits over their lifetime.

- ❖ **Disability would be overburdened**
Raising the retirement age would force more seniors to turn to disability rather than retirement, increasing government expenditures on this program

America cannot afford this change. Vote Greg Ellison for Congress.

Social Security Oppose Affirmatory

Social Security can be confusing...



❖ **When can I retire?**

❖ **Will I get to keep my benefits?**



Congress has proposed a new plan that would raise the retirement age to 68.

Greg Ellison supports this proposal

Social Security Support Front

Greg Ellison's View

There are good reasons for the change:

- ❖ **Americans are living longer**
The average life-expectancy of Americans today is 15 years longer than when social security was implemented
- ❖ **Americans are working longer**
Healthier lifestyle habits has enabled many Americans to productively remain at work longer.



Additionally, this proposal creates other benefits:

❖ **More working Americans = Healthier Economy**
*Boosting the retirement age would add \$30 trillion dollars to the economy over 30 years**

❖ **Delaying retirement leads to greater wealth**
Every year that individuals spend working increases their own personal wealth. Increasing the retirement age would allow seniors to have greater retirement income.

America cannot afford to do nothing. Vote Greg Ellison for Congress.

Social Security Support Non-affirmatory

Greg Ellison's View

There are downsides to this proposal:

- ❖ **Benefits get cut**
Raising retirement age constitute a benefit cut. When the age was raised from 65 to 67, workers of all ages saw a 13% cut in benefits over their lifetime.
- ❖ **Disability would be burdened**
Raising the retirement age would force more seniors to turn to disability rather than retirement, increasing government expenditures on this program



However, this proposal creates benefits:

❖ **More working Americans = Healthier Economy**
Boosting the retirement age would add \$30 trillion dollars to the economy over 30 years.

❖ **Delaying retirement leads to greater wealth**
Every year that individuals spend working increases their own personal wealth. Increasing the retirement age would allow seniors to have greater retirement income.

America cannot afford to do nothing. Vote Greg Ellison for Congress.

Social Security Support Affirmatory

Appendix H

Experiment Two, Stimuli Pilot 1: Questionnaire

STIMULI (one of four social security advertisements or one of four gun rights advertisements)

Comprehension (only shown to participants in social security condition)

Which of the following do you believe is the best description of the information in the ad you just viewed?

- This advertisement contained only statements supporting raising the retirement age
- This advertisement contained only statements opposing raising the retirement age
- This advertisement contained statements both supporting and opposing raising the retirement age
- None of the above are true

Comprehension (only shown to participants in gun rights condition)

Which of the following do you believe is the best description of the information in the ad you just viewed?

- This advertisement contained only statements supporting universal background checks
- This advertisement contained only statements opposing universal background checks
- This advertisement contained statements both supporting and opposing universal background checks
- None of the above are true

Comprehension (all)

The politician who created this ad, Greg Ellison, is most likely a:

- Democrat
- Republican
- Independent
- Don't know

How confident are you in your assessment of Greg Ellison's political party?

- Not at all confident
- Not too confident
- Somewhat confident
- Very confident
- Extremely confident

Expectancy disconfirmation

How surprising or unsurprising was the content of this ad?

- Very unsurprising
- Somewhat unsurprising
- Slightly unsurprising
- Slightly surprising
- Somewhat surprising
- Very surprising

How expected or unexpected was the content of this advertisement?

- Very unexpected
- Somewhat unexpected
- Slightly unexpected
- Slightly expected
- Somewhat expected
- Very expected

How similar or dissimilar was this advertisement to other political ads you have seen in the past?

- Very dissimilar
- Somewhat dissimilar
- Slightly dissimilar
- Slightly similar
- Somewhat similar
- Very similar

Party identification

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?

- Democrat
- Republican
- Independent
- Other
- I prefer not to answer

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

- Yes, Democratic
- Yes, Republican
- No, Neither

Would you call yourself a strong Democrat or a not very strong Democrat?

- Strong
- Not very strong

Would you call yourself a strong Republican or a not very strong Republican?

- Strong
- Not very strong

Appendix I

Experiment Two, Stimuli Pilot Three: New Stimuli Under Consideration

Proposed new front of gun rights advertisements (all four)

Gun rights can be confusing...



❖ **Who can legally own a firearm?**



❖ **What does the second amendment say about gun rights?**

Congress has proposed a new plan that would require universal background checks for gun purchases

What would this change mean for Americans?

Proposed new front of social security advertisements (all four)

Social Security can be confusing...



❖ **When can I retire?**



❖ **Will I get to keep my benefits?**

Congress has proposed a new plan that would raise the retirement age to 68.

What would this change mean for seniors?

Appendix J

Experiment Two Questionnaire (Pre and Post-tests)

Pre-test

Attitudes: gun rights

Some people believe that universal background checks should be required before individuals can purchase a gun. Universal background checks would require almost all firearms transactions in the United States to be recorded and go through the National Instant Criminal Background Check System. Do you support or oppose the idea of universal background checks?

- Support
- Oppose

Please answer the following questions.

Response options:

- Not at all
- Not very
- Somewhat
- Very
- Extremely

How certain are you of your feelings on the issue of universal background checks?

How sure are you that your opinions on universal background checks are correct?

How firm are your opinions on universal background checks?

How easily could your opinions on universal background checks be changed?

How definite are your views on universal background checks?

How convinced are you on the issue of universal background checks?

How important is the issue of universal background checks to you personally?

How much do you personally care about the issue of universal background checks?

How important would a candidate's position on universal background checks be if you were voting?

How much does the issue of universal background checks mean to you?

How important is the issue of universal background checks compared to other issues?

How strongly do you feel about the issue of universal background checks?

How strong are your feelings on universal background checks compared to other public issues?

How strong are your feelings on universal background checks compared with how most other people feel about universal background checks?

How intense are your attitudes on universal background checks?

Attitudes: social security

Assuming there would be no change in Social Security benefits for those who are currently 55 or older, would you support or oppose a proposal to raise the retirement age (age at which individuals receive full social security benefits) to 68?

- Support
- Oppose

Please answer the following questions.

Response options:

- Not at all
- Not very
- Somewhat
- Very
- Extremely

How certain are you of your feelings on the issue of raising the retirement age?

How sure are you that your opinions on raising the retirement age are correct?

How firm are your opinions on raising the retirement age?

How easily could your opinions on raising the retirement age changed?

How definite are your views on raising the retirement age?

How convinced are you on the issue of raising the retirement age?

How important is the issue of raising the retirement age to you personally?

How much do you personally care about the issue raising the retirement age?

How important would a candidate's position on raising the retirement age be if you were voting?

How much does the issue of raising the retirement age mean to you?

How important is the issue of raising the retirement age compared to other issues?

How strongly do you feel about the issue of raising the retirement age?

How strong are your feelings on raising the retirement age compared to other public issues?

How strong are your feelings on raising the retirement age compared with how most other people feel about raising the retirement age?

How intense are your attitudes on raising the retirement age?

Party identification

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent or what?

- Republican
- Democrat
- Independent
- Other (please specify) _____

If Republican is chosen: Would you call yourself a strong Republican or a not very strong Republican?

- Strong
- Not very strong

If Democrat is chosen: Would you call yourself a strong Democrat or a not very strong Democrat?

- Strong
- Not very strong

If Independent is chosen: Do you think of yourself as closer to the Republican party or the Democratic party?

- Yes, Democratic
- Yes, Republican
- No, Neither

Self-esteem

Please answer the following questions

Response options:

- Not at all
- A little bit
- Somewhat
- Very much
- Extremely

- I feel confident about my abilities
- I am worried about whether I am regarded as a success or failure
- I feel satisfied with the way my body looks right now
- I feel frustrated or rattled about performance.
- I feel that I have trouble understanding things that I read
- I feel that others respect and admire me
- I am dissatisfied with my weight
- I feel self-conscious
- I feel as smart as others
- I feel displeased with myself
- I feel good about myself
- I am pleased with my appearance right now
- I am worried about what other people think of me
- I feel confident that I understand things
- I feel inferior to others at this moment
- I feel unattractive
- I feel concerned about the impression I am making
- I feel that I have less scholastic ability right now than others
- I feel like I'm not doing well
- I am worried about looking foolish

Demographics

What age did you turn on your most recent birthday?

With which gender do you mainly identify?

- Male
- Female
- Other

Please indicate your household income from last year.

- Under \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$100,000
- Over \$100,000

Which of the following represents the highest level of education you have obtained?

- Grade school
- Some high school
- High school diploma or equivalent (i.e. GED)
- Some college
- Associate's degree
- Bachelor's degree
- Master's degree
- Advanced terminal degree (Ph.D., DPHIL, J.D., M.D., etc.)

Which racial or ethnic group or groups best describes you?

- African-American
- Asian
- Native American
- Hispanic or Latino
- Caucasian
- Other (please specify) _____

Political ideology

Here is a 7-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale, or haven't you thought much about this?

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate/Middle of the road
- Slightly conservative
- Conservative
- Extremely conservative
- Have not thought much about this

Experiment Two Post-Test

In this study, you will be asked to view a political advertisement for a candidate who will be running for Congress in your district in the next election. The candidates are real candidates, although the names have been changed. By entering your zip code below, you will be matched with candidates that may appear on your ballot in 2016. Please enter your zip code to be matched with candidates who may appear on your ballot.

STIMULI (one of eight advertisements)

Self-esteem scale

Please answer the following questions

Response options:

- Not at all
- A little bit
- Somewhat
- Very much
- Extremely

I feel confident about my abilities

I am worried about whether I am regarded as a success or failure

I feel satisfied with the way my body looks right now

I feel frustrated or rattled about performance.

I feel that I have trouble understanding things that I read

I feel that others respect and admire me

I am dissatisfied with my weight

I feel self-conscious

I feel as smart as others

I feel displeased with myself

I feel good about myself

I am pleased with my appearance right now

I am worried about what other people think of me

I feel confident that I understand things

I feel inferior to others at this moment

I feel unattractive

I feel concerned about the impression I am making

I feel that I have less scholastic ability right now than others

I feel like I'm not doing well

I am worried about looking foolish

Expectancy disconfirmation

How surprising or unsurprising was the content of this advertisement?

- Very unsurprising
- Somewhat unsurprising
- Slightly unsurprising
- Slightly surprising
- Somewhat surprising
- Very surprising

How expected or unexpected was the content of this advertisement?

- Very expected
- Somewhat expected
- Slightly expected
- Slightly unexpected
- Somewhat unexpected
- Very unexpected

How similar or dissimilar was this advertisement to other political advertisements you have seen in the past?

- Very similar
- Somewhat similar
- Slightly similar
- Slightly dissimilar
- Somewhat dissimilar
- Very dissimilar

Manipulation check (gun rights manipulation check for gun rights condition)

Which of the following do you believe is the best description of the information in the ad you just viewed?

- This advertisement presented only arguments in favor of raising the retirement age
- This advertisement presented only arguments in opposition of raising the retirement age
- This advertisement presented arguments both in favor of and in opposition to raising the retirement age
- None of the above are true

Counter-arguing

We are now interested in what you were thinking about while reading the political ad. Any idea or thought is fine, simply list what it was that you were thinking while reading the political ad for Greg Ellison. You should try to record only those ideas that you were

thinking while reading the political ads. Please write only one idea in each box provided below. We have deliberately provided more space than most people will need, so don't worry if you do not fill every space. Just write down whatever your thoughts were during the message. Please be completely honest.

Which of the following best characterizes this thought? (Thought 1)

- This is a thought about Greg Ellison
- This is a thought about social security
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is: (Thought 1)

- Positive
- Negative
- Neither positive nor negative
- Both positive and negative
- Unsure

Which of the following best characterizes this thought? (Thought 2)

- This is a thought about Greg Ellison
- This is a thought about social security
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is: (Thought 2)

- Positive
- Negative
- Neither positive nor negative
- Both positive and negative
- Unsure

Which of the following best characterizes this thought? (Thought 3)

- This is a thought about Greg Ellison
- This is a thought about social security
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is: (Thought 3)

- Positive
- Negative
- Neither positive nor negative
- Both positive and negative
- Unsure

Which of the following best characterizes this thought? (Thought 4)

- This is a thought about Greg Ellison
- This is a thought about social security
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is: (Thought 4)

- Positive
- Negative
- Neither positive nor negative
- Both positive and negative
- Unsure

Which of the following best characterizes this thought? (Thought 5)

- This is a thought about Greg Ellison
- This is a thought about social security
- This is a thought about this specific political advertisement
- This is a thought about political advertising generally
- None of the above are a good characterization of this thought

Generally, this thought is: (Thought 5)

- Positive
- Negative
- Neither positive nor negative
- Both positive and negative
- Unsure

Source credibility

Please rate Greg Ellison on the following characteristics.

Honest	1	2	3	4	5	6	7	Dishonest
Untrustworthy	1	2	3	4	5	6	7	Trustworthy
Honorable	1	2	3	4	5	6	7	Dishonorable
Moral	1	2	3	4	5	6	7	Immoral

Unethical	1	2	3	4	5	6	7	Ethical
Phony	1	2	3	4	5	6	7	Genuine
Intelligent	1	2	3	4	5	6	7	Unintelligent
Untrained	1	2	3	4	5	6	7	Trained
Inexpert	1	2	3	4	5	6	7	Expert
Informed	1	2	3	4	5	6	7	Uninformed
Competent	1	2	3	4	5	6	7	Incompetent
Stupid	1	2	3	4	5	6	7	Bright
Cares about me	1	2	3	4	5	6	7	Doesn't care about me
Has my best interests at heart	1	2	3	4	5	6	7	Doesn't have my best interests at heart
Self-centered	1	2	3	4	5	6	7	Not self-centered
Concerned with me	1	2	3	4	5	6	7	Unconcerned with me
Insensitive	1	2	3	4	5	6	7	Sensitive
Not understanding	1	2	3	4	5	6	7	Understanding

Vote likelihood

Please answer the following questions.

	Not at all likely	Not too likely	Somewhat likely	Very likely	Extremely likely
How likely would you be to vote for Greg Ellison?	<input type="radio"/>				
How likely would you be to participate in a political event (other than voting) for Greg Ellison?	<input type="radio"/>				

Attitude toward the politician

How likable is Greg Ellison?

- Not at all likable
- Not too likable
- Somewhat likable
- Very likable
- Extremely likable

We'd like to get your feelings toward some of our political leaders and groups. Please rate each of these people or groups on something we call the feeling thermometer. Ratings

between 50 degrees and 100 degrees mean that you feel favorable and warm toward the person or group. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person or group and that you don't care too much for that person or group. You would rate them at the 50 degree mark if you don't feel particularly warm or cold toward the person or group.

_____ Greg Ellison
 _____ Barack Obama
 _____ John Boehner
 _____ Republicans
 _____ Democrats
 _____ Congress

Attitude position: Social security

Note. Only shown to participants in one of the social security conditions.

Assuming there would be no change in Social Security benefits for those who are currently 55 or older, would you support or oppose a proposal to raise the retirement age (age at which individuals receive full social security benefits) to 68?

- Support
- Oppose

How certain are you of your feelings on the issue of raising the retirement age?

How sure are you that your opinions on raising the retirement age are correct?

How firm are your opinions on raising the retirement age?

How easily could your opinions on raising the retirement age changed?

How definite are your views on raising the retirement age?

How convinced are you on the issue of raising the retirement age?

How important is the issue of raising the retirement age to you personally?

How much do you personally care about the issue raising the retirement age?

How important would a candidate's position on raising the retirement age be if you were voting?

How much does the issue of raising the retirement age mean to you?

How important is the issue of raising the retirement age compared to other issues?

How strongly do you feel about the issue of raising the retirement age?

How strong are your feelings on raising the retirement age compared to other public issues?

How strong are your feelings on raising the retirement age compared with how most other people feel about raising the retirement age?

How intense are your attitudes on raising the retirement age?

Attitude position: Gun rights

Note. Only shown to participants in the gun rights conditions.

Some people believe that universal background checks should be required before individuals can purchase a gun. Universal background checks would require almost all firearms transactions in the United States to be recorded and go through the National Instant Criminal Background Check System. Do you support or oppose the idea of universal background checks?

- Support
- Oppose

Please answer the following questions.

Response options:

- Not at all
- Not very
- Somewhat
- Very
- Extremely

How certain are you of your feelings on the issue of universal background checks?

How sure are you that your opinions on universal background checks are correct?

How firm are your opinions on universal background checks?

How easily could your opinions on universal background checks be changed?

How definite are your views on universal background checks?

How convinced are you on the issue of universal background checks?

How important is the issue of universal background checks to you personally?

How much do you personally care about the issue of universal background checks?

How important would a candidate's position on universal background checks be if you were voting?

How much does the issue of universal background checks mean to you?

How important is the issue of universal background checks compared to other issues?

How strongly do you feel about the issue of universal background checks?

How strong are your feelings on universal background checks compared to other public issues?

How strong are your feelings on universal background checks compared with how most other people feel about universal background checks?

How intense are your attitudes on universal background checks?

Political knowledge

Please answer the following questions to the best of your knowledge.

How much of a majority is required for the U.S. Senate and House to override a presidential veto?

- 1/2
- 3/5
- 2/3
- 3/4

How long is the term of office for a United States senator?

- 2 years
- 3 years
- 4 years
- 5 years
- 6 years

What country is America's largest trading partner, that is, with what country the United States conducts the greatest amount of foreign trade?

- China
- France
- Canada
- Germany
- Mexico

What is the federal minimum wage right now?

- \$5.75
- \$6.50
- \$7.25
- \$8.00
- There is no federal minimum wage, states set the minimum wage

Who is the current United States attorney general?

- Hillary Clinton
- John Kerry
- Eric Holder
- John Roberts
- Loretta Lynch

Political cynicism

Response option:

Strongly Somewhat Slightly Slightly Somewhat Strongly

Disagree	Disagree	Disagree	Agree	Agree	Agree
<input type="radio"/>					

Most politicians do not consciously promise more than they can deliver.

Politicians are primarily self-interested.

In enabling someone to become a member of Congress, friends are more important than abilities.

Political parties are only interest in my vote, not my opinion.

Politicians do not understand what matters to society.

Politicians are capable of solving important problems.

Most politicians are competent people who know what they are doing.

Behavior questions

Would you be willing to sign a petition about increasing the retirement age for social security?

- Yes
- No

Would you like to receive more information about the potential effects of increasing the retirement age for social security?

- Yes
- No

It is possible to donate your earnings from this study to a grassroots organization that provides research on the issue of increasing the retirement age for social security. Would you like to donate all or a part of your earnings to this cause?

- Yes, donate all
- Yes, donate a part
- No

You are being paid \$1 to complete this study. How much would you like to donate?

Would you like to receive a monthly newsletter that specifically deals with this topic?

- Yes
- No

Please provide an e-mail address where you would like to receive the newsletter. Thank you.