

Driven to Extremes? Motivated Bias and Attitude Polarization in One-Sided Communication Flows

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Abstract

As political elites become more polarized, and political rhetoric becomes increasingly conflictual, normative concerns have emerged about the state of citizen opinion. Do citizens weigh information even-handedly, or is their focus more myopic? Are citizens driven to extremes by exposure to one-sided rhetoric from elites? Using a novel experimental design, I assess the extent to which individuals' attitudes toward marijuana legalization are influenced by targeted arguments in favor or opposition. Exposure to targeted argumentation leads to biased information processing on the part of subjects, with normatively concerning implications for opinion. Results suggest that biased processing leads to polarized opinion not only on the targeted issue, but also spreads to unrelated issues. These effects are moderated only by accessibility of prior beliefs. These findings suggest a point of concern for the objectivity of citizens when faced with one-sided political debate.

Citizen attention to politics and how they respond to political debate remains issue of great scholarly concern. While both early work on voting and opinion (Berelson et al. 1954; Converse 1964) and more recent studies of levels of political knowledge among the mass public (Delli Carpini and Keeter 1996) suggest citizens are generally disinterested in the events of daily politics, it would be going too far to assert that citizens are entirely divorced from political life and ignorant of political events.

Rather, citizens, when confronted with issues important to them, do in fact respond to political debate. Building from Converse's (1964) notion of issue publics, while general political knowledge may not abound in the minds of citizens, many in fact have issues important to them, about which they seek to remain informed (Henry and Gordon 2001). The extent to which they view an issue as personally important to them drives them to learn more about the issue, particularly if their emotional involvement in the issue is high (Nadeau et al. 1995). The recent Tea Party and Occupy movements exemplify this; issues and specific acts of government, such as the passage of health care reform and the bailout of the banking industry can invigorate citizens to attend to politics, and even mobilize them to participate in ways they otherwise would not.

Given that the ignorance of the citizenry as a whole may be overstated, and that individuals may hold distinguishable attitudes with respect to issues they view as personally relevant, the question remains: how resistant to persisting attempts at persuasion and attitude change are such issue-specific attitudes? The possession of general political knowledge allows individuals to recognize and then counterargue information which is inconsistent with their existing views (Lodge and Taber 2000), as has specific issue interest (which produces greater

issue involvement (Lavine et al. 2000). These suggest a more positive view of the relationship between elite rhetoric and citizen opinion. But should it?

While existing literature suggests that the attitudes of many are overly responsive to elite appeals due to their lack of political knowledge (privileging political sophistication as a moderator of persuasive attempts) (Petty and Cacioppo 1996), this project seeks to build upon previous findings by considering the role of attitude accessibility as a moderating factor of biased information processing, and the implications of such biased processing for attitude extremity. Results from an experiment in which subjects were exposed to one-sided communication on a particular issue demonstrates that biased information processing polarizes opinion on not only the targeted issue, but on unrelated issues as well. With the proliferation of media outlets allowing citizens to choose the perspectives their news is reported in, these findings paint a normatively troubling picture of a perpetually polarized public.

Strength and Stability of Attitudes

A consideration of how political communication affects the beliefs of citizens necessitates first a consideration of the nature of attitudes as they exist in the minds of citizens. Psychology has long been focused on understanding attitudes and their implications for behavior, with attitudes being privileged as the core concept of interest (Allport 1935). A standard definition describes attitudes as “associations between a given object and a given summary evaluation of the object — associations that can vary in strength and, hence, in their accessibility from memory (Fazio 2007, p. 608). The accessibility of an idea, notion, or concept is a function of the rate which it is transferred from long-term memory to working memory, where it may influence judgments. When forming judgments, citizens are thought to integrate among

available considerations stored in memory. More accessible concepts, which are considered more frequently, have greater weight in this process; as such, they become increasingly more likely to be selected as a consequence of the search through memory, and subsequently influence opinion (Zaller 1992; Zaller and Feldman 1992).

This notion of an attitude-objects' activation potential is derived from an associative network model of memory (for a detailed discussion of this concept see Judd and Krosnick 1989). Related considerations are stored together in long-term memory, forming webs of connected ideas and concepts. When a consideration is activated as part of a memory search, closely related considerations are activated as well. While a given idea may have a number of associations, the chance that any one of those related conceptions is made salient is a function of the strength of the association; better connected notions are called to mind more quickly, and more likely to be activated jointly (Fazio 1995).

From this, it seems reasonable to consider attitudes as existing on a continuum as determined by the existing connections between an attitude-object and its related evaluation. Attitudes may be strong, weak, or even nonexistent, as per Zaller's 'top of the head' model of mass opinion posits (Zaller 1992), depending on the existence (or lack thereof) of a linkage between some attitude object and an evaluation. As attitude strength increases, so should the probability of joint activation between attitude object and evaluation. The focus of this paper is an examination of the specific role of attitudes, and particularly the accessibility of those attitudes as a moderator of the effects of contextual information. Because the relationship between attitudes and behavior increases as a function of the strength of existing attitudes (Lodge and Taber 2005), it is necessary to next outline existing conceptions of attitude strength, and the subsequent implications for such for behavior.

Building from the work of Krosnick and Petty, strong attitudes are those which “manifest the qualities of durability and impactfulness” (1995, p. 3). They represent well-defined connections between attitude-object and evaluation. Strong attitudes, in addition to serving as consistent and influential guides for citizens in shaping opinion, are also stable and resistant to attempts at attitude change (Petty and Cacioppo 1996; Eagly and Chaiken 1993). As the linkages between object and evaluation increase, attitudes become resistant to change as a function of the speed with which they are brought into memory; stronger attitudes are brought to mind more quickly, crowding out other considerations which are less closely linked (Dijksterhuis and van Knippenberg 1996).

Motivated Biases

Despite the resilience of strong attitudes to outside influence and change, attitudes and their expression generally have been shown in many cases to be quite malleable. Attitudes (or expressed opinion, which should reflect those underlying attitudes) are responsive to varying cues contained within the political context (Kuklinski et al. 2000), with certain types of messages holding greater sway over time on the minds and attitudes of citizens (Cobb and Kuklinski 1997). This process of change in expressed attitudes occurs as a function of citizen exposure to, comprehension, and acceptance of information disseminated by elites (McGuire 1985). Here, the key component is the underlying motivations of citizens as they encounter the information.

The motivations of citizens as they process information have been described as two distinct, competing goals: to be correct, as well as behaving in manners which are consistent with their prior beliefs (Kunda 1990; Taber and Lodge 2006; Taber et al. 2001; Nir 2011), although, above all else, citizens are thought to be motivated more by the latter than the former

(Kunda 1990). Together, these inner motivations affect the ways in which individuals approach becoming informed, including selectivity in what information they choose to expose themselves to, as well as how they evaluate incoming information (Lebo and Cassino 2007).

The implications of such motivational biases for opinions are quite profound. Citizens do not treat all information equally; rather, they easily accept arguments supporting prior beliefs while downplaying or scrutinizing inconsistent information (Ditto and Lopez 1992; Kunda 1990; Taber and Lodge 2006). Such effects hold whether driven purely by prior attitudes (Taber and Lodge 2006; Taber et al. 2009), or more general, abstract constructs such as partisanship and ideology (Jost and Amodio 2012; Slothuus and Vreese 2010). While used as something of a defense mechanism, to protect attitudes, such biased thinking has also been shown to increase attitude polarization (Taber and Lodge 2006).

While powerful and pervasive, cognitive biases may be overcome. When facing circumstances of increasing anxiety, citizens may be induced to update accurately, rather than proceeding to behave in a biased manner (Redlawsk et al. 2010). More generally, it has been noted that biased processing requires some level of knowledge or cognitive sophistication. While little sophistication is required to recognize the (in)consistency of information, citizens do require some contextual political information or an accessible heuristic shortcut (such as partisanship) to engage in biased processing.

Reconsidering Motivations

In these models, political sophistication is often used as a proxy measure for citizen attention to politics, and their subsequent probability of attitude change (Zaller 1992). For most issue areas, sophisticates should possess reasoned opinions or some form of contextual

information allowing them to make an informed judgment or bring complex principles to bear (Sniderman et al. 1991), as the body of knowledge they possess is thought to represent a greater capacity to reason about all things political and beyond (Luskin 1987, 1990). Sophistication thus is thought to allow citizens to increasingly resist attempts at persuasion, given that their attitudes are likely to be better informed, and thus better crystallized.

While this is a useful generalization for explaining the state of public opinion broadly, it understates the role which preexisting attitudes and characteristics of those attitudes may play in citizen response to elite communication. I argue that by treating sophistication as a catch-all when considering the formation and expression of opinion in light of elite manipulation, we are missing nuance in our understanding of citizen response.

In an effort to extend our understanding of the nature of individual attitudes, I look instead to specific characteristics of individual attitudes; namely attitude accessibility, and the role it plays in shaping subject response to repeated exposure to argumentation. Accessible arguments are thought to come to mind much more readily when searching memory while making judgments (Zaller 1992), and have been shown to moderate the effectiveness of particular types of frames (Shen 2004). Highly accessible attitudes are thought to be representative of high levels of attitude involvement (Lavine et al. 2000), which could reduce potential bias in measurement over relying on survey respondents' self-reports of the importance of issues to them.

Attitude accessibility would seem to be an important component of studies on motivated reasoning. Yet response latencies, commonly used as measures of attitude accessibility, are not typically measured in surveys, particularly large-scale phone surveys that have become the norm (but see work by Huckfelt (1998; 1999; 2005; 2000) and Johnson (2004) for examples of

response latencies captured during large-scale surveys). . Arguably, this leads work in motivated reasoning to use proxy measures for accessibility such as sophistication to characterize attitudes in studies of motivated reasoning. Building from this lacuna, I seek to understand how variation in existing attitude strength conditions responses to repeated exposure to argumentation that is either consistent or inconsistent with prior beliefs.

Study Design and Expectations

To test the effects of disconfirmation biases on opinion holding, I use a between-subjects (pro vs. anti), quasi-experimental design. Subjects were randomly assigned to one of two experimental conditions (positive argumentation, or negative argumentation). A total of 396 subjects, recruited from Political Science courses at a western research university, participated in the study for course credit.

Subjects completed the study at a computer terminal using the Inquisit experimental software. The survey consisted of an introductory demographic battery, measuring political awareness, and partisanship. Following this, subjects completed a series of dichotomous evaluations of issues, culminating in their opinion on marijuana legalization. Afterward, subjects were randomly assigned to one of the two experimental conditions, *independent* of their initial attitudes toward marijuana legalization. In each of these conditions, subjects were presented with 6 arguments about marijuana legalization (either pro or anti-legalization), and asked to rate the degree to which they agreed with each.¹ Finally, subjects were asked the extremity of their attitudes toward the issues they had evaluated previously, including marijuana legalization before being thanked and excused. As part of the study, subjects' responses to each item were timed to

¹ All arguments are designed to be of the same length and strength. Presentation of the arguments was randomized within conditions; an analysis of the questions find that only 3 of the 30 pairwise comparisons are statistically different from one another, suggesting the questions are seen as comparable across subjects.

the millisecond using latent timers. These timers start following the completion of the stimulus presentation and stop once the subject provides a response.² This design will allow for the replication and extension of previous research on disconfirmation biases and attitude polarization, considering both the role of attitude accessibility as a moderator of biased processing, and the implications of exposure to one-sided argumentation for seemingly unrelated opinions.

Hypotheses

The above design will allow a test of the following expectations:

H1: Respondents should resist arguments which are inconsistent with prior beliefs.

H2: The accessibility of attitudes in memory should moderate subjects' responses to inconsistent arguments.

These expectations from work by Zaller (1992) and subsequent extensions examining the effects of motivated reasoning (see Taber and Lodge (2006); Taber et al. (2009)). Respondents have been shown to evaluate information less favorably when it diverges from prior beliefs. Yet while we know that the accessibility of information in memory is an important part of how we process information, affecting the extent to which individuals are aware considerations are consistent or inconsistent with prior beliefs (Zaller 1992; Zaller and Feldman 1992) and the utility of those priors for expressing judgments (Huckfeldt et al. 1999), we know less about how the accessibility of prior attitudes serves to moderate the efficacy of political appeals. H2 raises this point: how should attitude accessibility affect the evaluations of political arguments. As noted, accessible attitudes are those with which individuals are likely to be strongly involved,

² There has been some debate regarding the use of latent timers as opposed to active timers, where the researcher is required to start and stop timing. Such measures could not be implemented based upon the research design; however, there has been no evidence that latent timers induce bias into the response measures (Mulligan et al. 2003).

and, as such, are subsequently better considered and thus more resilient to change. This should increase the tendency of subjects to discounting information which is inconsistent with existing beliefs and counterargue contrary information (Haider-Markel and Joslyn 2001; Brewer 2001).

H3: As subjects' evaluations of the arguments presented becomes more extreme, their opinions should become more extreme as well.

H4: Polarization should spread to related attitude objects.

H3 builds from findings which suggest rebound effects in attempts to persuade citizens. While it was initially thought that failed attempts at persuasion would have no effect on subsequent opinions, a line of research has demonstrated that resisting persuasive attempts in the form of counterargumentation increases individuals' certainty in their attitudes (Tormala and Petty 2004, 2002). While certainty and extremity are thought to be distinct constructs (Tormala and Rucker 2007), certainty has been shown to significantly increase attitude strength (Petty and Krosnick 1995), and even amplifies attitudes (Clarkson et al. 2008).

In the opposite direction, those who agree more strongly with the arguments they are exposed to should also show examples of attitude polarization. Not only do disconfirmation biases result in polarized opinions; as one would expect, increased exposure to information confirming prior beliefs also increases attitude extremity (Stroud 2010; Taber and Lodge 2006; Taber et al. 2009).

In an additional contribution, this paper considers how this polarizing effect may spread. Research in memory suggests that long-term, stored memory operates as a network of interconnected constructs (Collins and Loftus 1975) with more closely related considerations stored together more closely. As a consequence, when searching through stored memories for considerations, more closely clustered objects may be activated jointly with the searched for attitude object (Kunda 1999). I argue that a similar process should result in the transfer or

spread of attitude polarization from one issue (here, the legalization of marijuana) to other issues that are stored nearby in memory, as noted in H4. As individuals' opinions are pushed to extremes by exposure to arguments on one issue, reevaluation of other opinions should demonstrate similar polarization to the extent that they are stored in memory close to their opinion on marijuana legalization, and are accessible.

Measuring Attitudes

To test these expectations, I look at three distinct outcomes: first, subjects' level of agreement with the arguments they are exposed to, second, the extremity of subjects' opinion toward marijuana legalization, and finally, the extremity of their opinions toward a battery of unrelated issues. The first is an additive measure of agreement with each of the six arguments subjects were exposed to, which runs from 0 to 6.³ The second dependent variable is a measure of the direction of subjects' opinion toward marijuana legalization, measured on a five-point scale. This variable runs from 1 (favor) to 5 (oppose). The final set of measures includes a battery of unrelated items.⁴

As a first cut, I examine mean levels of agreement by treatment, prior attitude, and accessibility of that prior. These estimates are plotted in Figure 1.

Figure 1 about here

These preliminary findings demonstrate clear support for biased information processing, with agreement increasing dramatically when arguments are consistent with prior attitudes. These effects are magnified further among those whose attitudes are more accessible.

³ Agreement with each argument is measured on a five-point scale (strongly disagree to strongly agree). Each

⁴ In addition to marijuana legalization, subjects were asked to take positions on free-trade, the death penalty, being pro-life, drilling in the Arctic, the Patriot Act, the War in Iraq, school prayer, being pro-choice, and gun control.

To more systematically examine these differences, I regress agreement on a measure for the treatment condition, subjects' prior attitude, and the interaction between the two. Argument agreement and attitude extremity are predicted using a dummy variable for the experimental treatments. Models also include a dummy variable for subjects' prior attitudes (1 if in favor, 0 if opposed). Moving beyond the baseline model, I also account for the accessibility of subjects' priors.⁵ In addition to examining these relationships in the pooled sample, I also run separate models⁶ for those whose have highly accessible attitudes and those whose attitudes are less accessible.⁷ Results are presented in Table 1.

Table 1 about here

The pooled sample provides further evidence for disconfirmation biases in information processing. Those who receive only arguments that are consistent with their prior beliefs are significantly more likely to agree with those arguments, an average increase of about two points on the seven-point scale. Conversely, those who only received arguments that diverged from their prior are dramatically less likely to agree with those arguments, a change of nearly four points on the seven-point scale.

A similar pattern appears when modeling agreement as a function of accessibility in addition to the treatments and subjects' priors. The principal difference is the magnitude of the

⁵ Accessibility is the response latency for a subjects' first response when asked to evaluate marijuana legalization. While time of response is measured in milliseconds, I chose to dichotomize accessibility using a median split to simplify analyses.

⁶ Results hold when the proper three-way interactions between treatment, prior, and accessibility of the prior are included; I present separate models splitting the sample by accessibility to simplify presentation.

⁷ The existing literature on attitudes conceives of attitude strength in a number of ways conceptually, including the perceived importance of such attitudes, the accessibility of such attitudes, attitude ambivalence, and certainty about existing attitudes (Miller and Peterson 2004). While each of these constructs has been shown to capture some elements of attitude strength and a number of them are strongly related, they remain somewhat distinct (Krosnick et al. 1993). For the purposes of this analysis I will focus on attitude accessibility as a measure of the strength of existing attitudes. Accessibility is conceived of as the availability of an attitude when asked to provide a related opinion as measured by the time to provide a response. This stems from the notion of associations in memory from some attitude object and one's evaluation of that object, in which stronger associations result in faster responses and facilitated decision-making (Fazio 1995).

effects, which are nearly double among those subjects with more accessible attitudes, providing support for H2. More accessible attitudes appear to enhance the effects of disconfirmation biases, which is fitting with previous findings on accessibility. Those who are more cognizant of their existing attitudes are then better capable of recognizing arguments that are consistent or inconsistent with those priors, and responding accordingly. Having provided further confirmation for bias in information processing, the next step is to examine the implications of that bias for opinion-holding.

Argumentation and Polarization

When faced with repeated arguments that may or may not coincide with preexisting beliefs, individuals engage in biased information processing. More importantly is to consider, are people being moved by their biased processing, and in which direction? The second set of analyses focuses on the direction of that change. Are individuals exposed to particular arguments more likely to then express more extreme opinions? To determine whether or not this is the case, the extremity measure of legalization opinion (as measured on a five-point scale, from oppose to favor) is regressed on the dummy variable for subjects' treatment condition, the average measure of their agreement with the arguments (rescaled to run from 0 to 1), and the interaction between the treatment and agreement. As with the analyses of biased processing, I first estimate analyses of the full sample, and then reestimate the models splitting the sample by attitude accessibility. These results are presented in Table 2 below.

Table 2 about here

The patterns of results are similar to those obtained in Table 1. We see that subjects in the negative treatment condition who completely disagree with those arguments become more

favorable of marijuana legalization. As agreement with those negative arguments increases however, subjects are pulled in the exact opposite direction, becoming significantly less likely to support legalization, while those who agree with positive arguments become much more favorable, supporting the expectations of H3.

Breaking down the sample to consider the effects of attitude accessibility, patterns of results are identical, with slightly larger effects for subjects with more accessible attitudes. The substantive effects of the treatments on the likelihood of supporting marijuana legalization are plotted by agreement with the arguments and attitude accessibility in Figure 2.

Figure 2 about here

In both conditions, we see larger effects of exposure to arguments among those with more accessible attitudes, and weakest effects among those with less accessible priors. However, among all subjects, agreement with the arguments matter. Across treatments and direction of opinions, the likelihood of holding a given position converges across levels of attitude accessibility as agreement (or disagreement) with the manipulations increases. The largest differences in the impact of accessibility on extremity of opinions appear in the mid-ranges of agreement, an interesting result.

Driven to Extremes?

The final question, having demonstrated that citizens do respond to issue argumentation, is the extent to which such arguments, in essence, ‘drive citizens to extremes’ across a body of issues unrelated to the experimental manipulation. As with the models in Table 2, opinion is regressed on the treatment condition, agreement with the experimental arguments, and the interaction between the two. In addition, these models include a control for subjects’ prior

attitudes on the issue, measured as a dichotomy (1 – favor, 0 – oppose). These results are presented in Table 3.

Table 3 about here

The test of the spread of attitude polarization following exposure to unrelated political argumentation presented in Table 3 provides strong support for H4. Of the nine items (seven ideologically conservative, and two liberal), only three of main treatment effects and the interactions (support for the death penalty, the War in Iraq, and gun control) fail to reach conventional levels of statistical significance (although the measure predicting support for the Iraq War is significant at the 0.1 level). Across these issues, a similar story can be told: agreement with anti-legalization arguments increases the extremity of conservative positions taken on issues, while disagreement with those arguments softens that negativity. Conversely, increased agreement with positive agreement increases extremity of liberal positions on six of the nine issues (the exceptions being the death penalty, as well as positions toward being pro-choice and pro-life).

The consistency of these effects across issues, which only share an ideological similarity with marijuana legalization potentially has strong implications of how we think about the effects of media on opinion. The breadth of issue areas which opinion is affected suggests that even individuals whose attention to politics is limited may be polarized, and the effects are not limited to only experiencing disagreement. As recent studies of media have suggested, individuals seek out media sources which confirm their beliefs (Iyengar and Hahn 2009), and perceive those sources as less biased (Feldman 2011). The saving grace may be that the effects of these polarizing arguments on opinion extremity are somewhat limited as levels of agreement and

disagreement with the arguments which one is exposed to are mixed; among these individuals, position-taking becomes closer to a coin flip than a sure thing.

Conclusion

Politics is by its very nature a competitive and combative endeavor, as elites vie against one another to achieve desired ends. Elites put forth a variety of arguments for citizens to consume, seeking to appeal to values and beliefs held by citizens and hoping to shift the tide of opinion to their benefit (Jacobs and Shapiro 2000). But what of those citizens, and the nature and structure of public opinion, facing such a wave of debate? Findings from a series of analyses suggest that the nature of argumentation and debate has a profound impact on consistency and extremity of opinion, but that such effects are not universal. Rather, the influence of issue arguments is moderated by the accessibility of prior attitudes, as well as the extent to which they view such arguments, evaluate them, and finally accept or reject them.

Data from a unique experimental study paints on one hand, a picture of responsive citizens, evaluating arguments carefully in the context of existing attitudes, a far cry from the aimless citizen producing top of the head responses when asked for an opinion. Unfortunately, on the other hand, we see that exposure to those one-sided arguments pushed respondents to extremes, not only for the targeted issue, but for other, unrelated issues as well. With the proliferation of media outlets, and the ability of citizens to choose discourse targeted toward their beliefs, this paints a normatively concerning picture of citizens tuning in and finding their opinions not only bolstered, but also polarized.

It should be noted that these results stem from exposure to one-sided argumentation, under circumstances where subjects had no control over what they were exposed to. While

under certain circumstances, citizens undertake broad and exhaustive information searches, increasing complexity in the environment or decision task leads to truncated, simplified quests for information (Redlawsk 2004), with citizens often focusing on information congruent with their previously held beliefs (Meffert et al. 2006; Redlawsk 2001). It is important then that the polarizing effects of exposure to a one-sided flow of information emerge at *either* end of the extremes of motivated information processing, where subjects agreed or disagreed to a great extent with the information they were exposed to.

Before rushing to condemn the average citizen, who has long been decried as ignorant and inattentive, and here shown to be susceptible to being driven to extremes, certain limitations to the study design should be acknowledged. While the evidence from the above studies suggests that argumentation affects the direction and extremity of opinion, subjects were asked to evaluate the arguments in only in the context of their own beliefs. Typical political communication does not exist in a vacuum, but rather is presented to citizens embedded in additional contextual information and heuristic cues which have been shown to shape opinion.

While under certain circumstances such additional information has been shown to decrease the quality of citizen decision-making (Boudreau 2007), generally, such cues allow citizens to transcend their limitations in information (Lupia 1994; Popkin 1991). Providing subjects with additional contextual cues, such as attributing the argumentations to varied sources, or varied partisan endorsements may have also influenced their impact beyond simply having citizens to evaluate the arguments on their own merits. Additionally, argumentation varies in its persuasive capacity; some arguments may be classified as strong, while others may be characterized as weak at best (Chong and Druckman 2007). Are individuals with weak attitudes less capable of discerning between one over the other, and thus effected more dramatically?

Table 1. Evaluations of Arguments

	Baseline	High Accessibility	Low Accessibility
Negative Treatment	1.96** (0.16)	2.71** (0.26)	1.52** (0.19)
Prior Attitude	1.90** (0.15)	2.50** (0.23)	1.27** (0.20)
Treatment x Prior	-3.59** (0.22)	-4.70** (0.32)	-2.56** (0.28)
Constant	2.01** (0.11)	1.67** (0.19)	2.19** (0.13)
R	0.41	0.52	0.31
N	396	198	198

DV: 1 to x. Cell Values are OLS regression coefficients with robust standard errors in parentheses. + *
**

Table 2. Attitude Polarization

	Baseline	High Accessibility	Low Accessibility
Negative Treatment	5.68** (0.40)	6.03** (0.57)	5.02** (0.58)
Treatment Agreement	6.21** (0.44)	6.07** (0.62)	6.04** (0.68)
Treatment x Agreement	-11.29** (0.76)	-11.96** (0.99)	-10.02** (1.19)
Cut 1	1.50 (0.22)	1.40 (0.32)	1.46 (0.31)
Cut 2	2.50 (0.24)	2.27 (0.35)	2.54 (0.34)
Cut 3	3.57 (0.27)	3.19 (0.40)	3.74 (0.38)
Cut 4	4.88 (0.31)	4.59 (0.46)	5.32 (0.48)
Wald	235.03	153.90	89.71
N	396	198	198

DV: 1 (strongly oppose) to 5 (strongly favor). Cell values are ordered probit coefficients with robust standard errors in parenthesis. + * **

Table 3. Spread of Attitude Polarization

	Free Trade	Death Penalty	Pro-Life	Offshore Drilling	Patriot Act	War in Iraq	School Prayer	Pro-Choice	Gun Control
Negative Treatment	-0.58*	-0.24	-0.81*	-0.84**	-1.04**	-0.47+	-1.05**	0.61*	0.48+
	(0.28)	(0.32)	(0.30)	(0.29)	(0.33)	(0.29)	(0.31)	(0.31)	(0.29)
Treatment Agreement	-0.75*	-0.53	-0.76+	-0.89**	-1.00*	-0.99**	-1.00*	0.30	0.87*
	(0.33)	(0.41)	(0.42)	(0.34)	(0.48)	(0.37)	(0.38)	(0.41)	(0.39)
Treatment x Agreement	0.97*	0.68	1.39*	1.53**	1.92**	0.94+	2.25**	-1.31*	-0.68
	(0.49)	(0.55)	(0.55)	(0.53)	(0.65)	(0.54)	(0.56)	(0.57)	(0.54)
Prior	2.37**	2.48**	1.54**	2.78**	2.69**	2.99**	3.59**	1.85**	1.55**
	(0.27)	(0.19)	(0.14)	(0.22)	(0.22)	(0.25)	(0.30)	(0.17)	(0.17)
Cut 1	-1.25	-0.32	-0.46	-0.30	-0.34	-0.07	0.0003	-0.01	0.13
	(0.26)	(0.25)	(0.26)	(0.20)	(0.26)	(0.21)	(0.21)	(0.25)	(0.25)
Cut 2	0.02	0.70	0.18	0.72	0.67	1.36	1.09	0.55	0.72
	(0.27)	(0.26)	(0.26)	(0.20)	(0.26)	(0.23)	(0.21)	(0.25)	(0.25)
Cut 3	1.03	1.53	0.78	2.01	1.86	2.16	2.52	0.98	1.16
	(0.31)	(0.28)	(0.27)	(0.26)	(0.30)	(0.29)	(0.38)	(0.26)	(0.26)
Cut 4	2.26	2.69	1.35	3.27	3.01	3.14	3.59	1.65	1.94
	(0.33)	(0.32)	(0.28)	(0.29)	(0.34)	(0.32)	(0.38)	(0.27)	(0.28)
Wald	94.43	186.81	136.11	174.83	171.71	183.73	157.21	124.35	82.19
N	387	369	364	366	360	371	371	377	372

DV: 1 (strongly oppose) to 5 (strongly favor). Cell values are ordered probit coefficients with robust standard errors in parenthesis. + * **

Figure 1. Mean Agreement with Argumentation, by Treatment and Prior Attitude

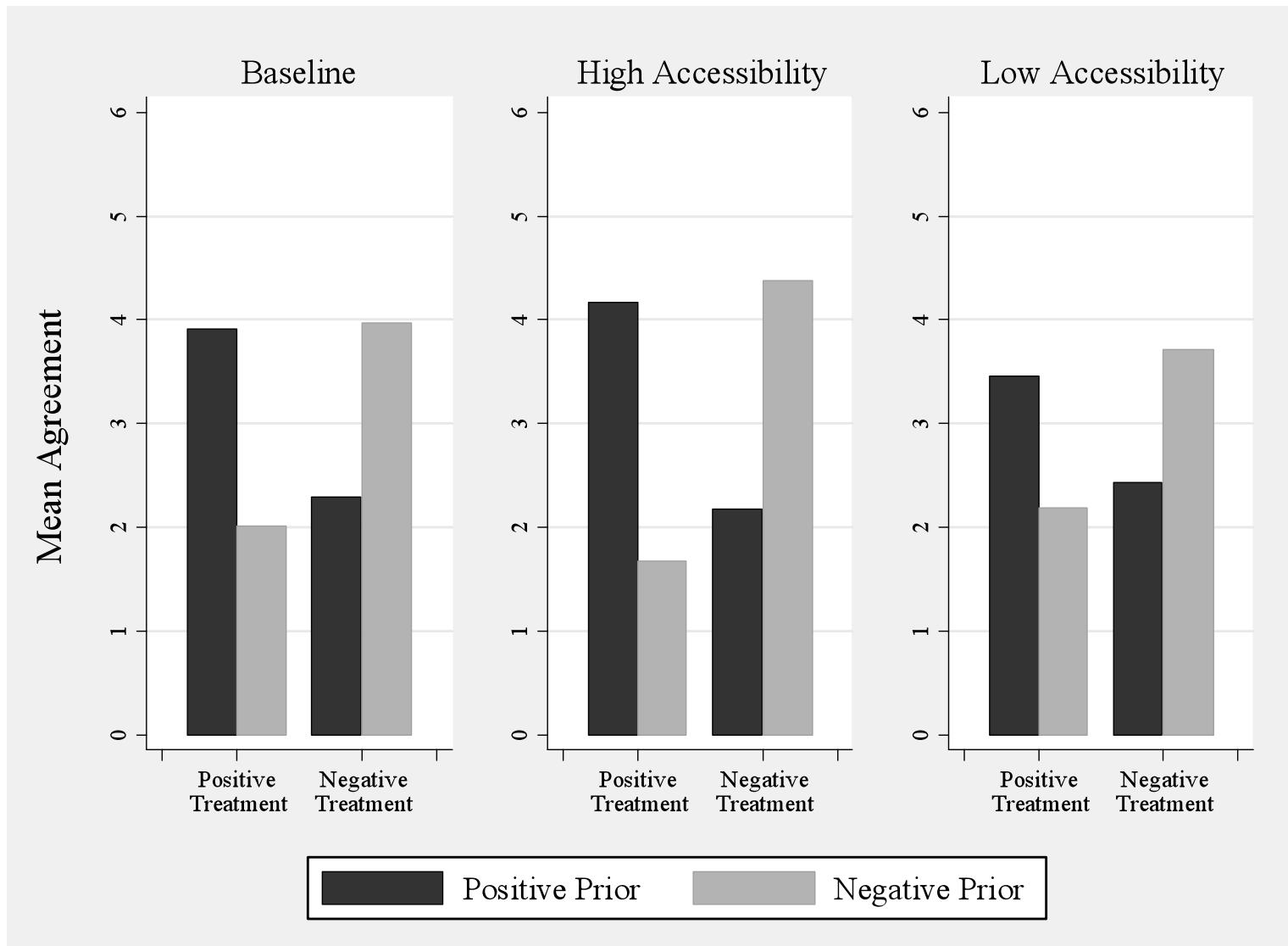
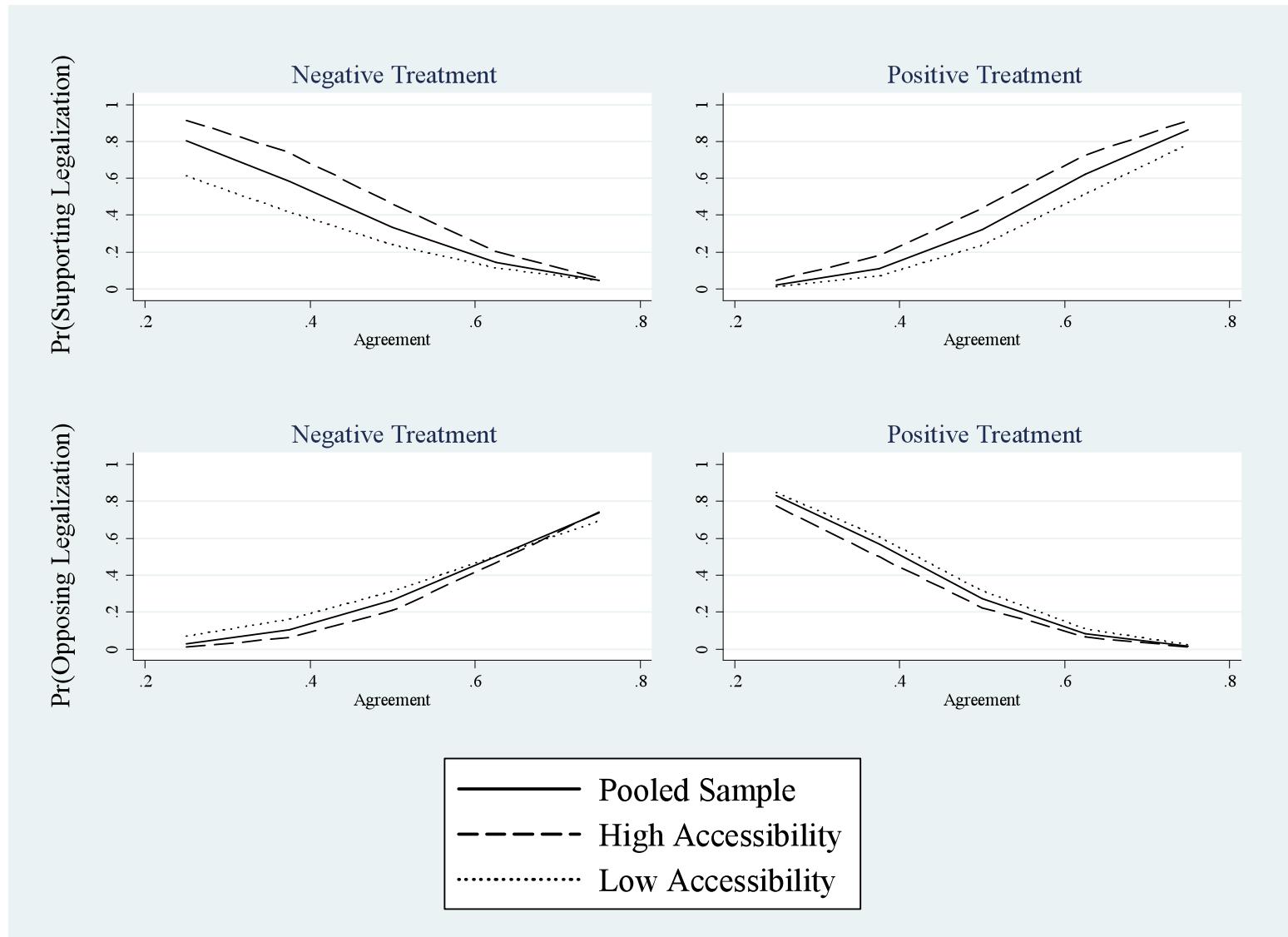


Figure 2. Attitude Polarization



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