# Supplemental Appendix: Diverse Pre-Treatment Effects in Survey Experiments

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### 1 Question wording and survey design

Our study is a two-wave survey, which allows us to capture change in opinion over time in response to an event occurring between the two waves – in this case, a Supreme Court ruling. A major advantage of two-wave, within-subjects studies is that they allow for precise estimates and aid in identifying causality (Mutz 2011, 93). Indeed, given Bartels' (1999) finding that panel effects rarely occur, the short length of the Wave 1 survey, and the fact that it included only one question on the Supreme Court, we believe it is unlikely that our Wave 1 questionnaire influenced respondents' views six weeks later, when they responded to the Supreme Court decisions and completed Wave 2. In addition, to disguise our purpose and identify which respondents were paying attention to the news at the time of the Court decisions, Wave 2 began with a series of recent news headlines, asking respondents which, if any, they had seen.

The table below presents the Wave 1 question wordings; respondents saw Q1-Q4 in order. The responses did not include a "don't know" option. Response options were presented in random order where noted in the tables.

	Health care	Immigration	
	How important are the following issues to you?		
Q1: Personal importance	ce Issues: unemployment, taxes, health care, war, immigration (in random order)		
	Response options: unimporta somewhat important, very in	, , ,	
Q2: News sources	In a typical week, from which of the following television news sources do you get most of your information about politics and current events? If you do not watch any of these, please mark "none of these." <sup>a</sup>		
	Response options: NBC, AB MSNBC, Univision, Telemur random order)		
Q3: Opinion	Do you support or oppose federal legislation requiring all Americans to purchase health insurance?	Do you support our oppose state laws requiring police to investigate the immigra- tion status of any person during a traffic stop, based on "reasonable suspicion" that the person is in the country unlawfully?	
	Response options: strongly support, somewhat support, neither support nor oppose, somewhat oppose, strongly oppose	Response options: strongly support, somewhat support neither support nor oppose somewhat oppose, strongly oppose	
How much confidence do you yourself have in the United States Supreme Court? Q4: Trust		yourself have in the t?	
	Response options: a great de confidence, hardly any confid		

Time 1 questions and response options

 $^{a}$  Respondents were allowed to select multiple options.

The following two tables present our question wordings from Wave 2 of the study, as well as the three experimental reminder wordings. In Wave 2, all respondents were first randomly assigned to one of four groups (No reminder, Reminders 1-3) while blocking on race, interest in the news, and viewership of Fox News in particular, to help us minimize error and noise (see Mutz 2011, 95).

Reminder 3 featured an argument from the health care dissent, and from the immigration concurrence, to most accurately reflect the real-world judgment. A concurrence is a separate judicial opinion that comes to the same conclusion as the majority opinion using different reasoning. For example, a concurrence might say "we vote to uphold an immigration restriction, taking into account concerns about racial profiling," whereas a dissent might have said, "we vote to strike down an immigration restriction, because of concerns about racial profiling." Prior research suggests that, although concurrences include counter-arguments, they do not necessarily reduce support for a position. They may, in fact, increase support, because the judge that presents both sides of the argument is viewed as more thoughtful (Simon and Scurich 2011).

This is what we found in our immigration study: It is possible that respondents treated the concurrence as a weak pro-argument, as it contained elements of a frame opposed to the decision, but ultimately supported the decision. Respondents could even have interpreted the concurrence as a strong pro-argument, as the justices saw enough reason to vote in favor, despite misgivings (see, e.g., the summary of strength and direction of framing effects in Chong and Druckman 2010).

All respondents were asked Q1, about news awareness, and these response options

were ordered randomly. If respondents indicated they had seen news about the Court ruling, they were then asked Q2, as well. Next, respondents were exposed to the treatment condition to which they had been assigned (either no information or some information about the Court ruling). Adding information in Reminders 2 and 3 serves to increase the 'realism' of our treatment (e.g. the distinction made in Vraga et al. 2010). Finally, respondents were asked Q3 and Q4. The responses did not include a "don't know" option.

	Health care	Immigration		
	Do you remember hearing at	bout any of the following		
	news stories in the last few $apply.^a$	lays? Please check all that		
Q1: News awareness	health care legislation / Ariz Curry leaves the Today Show Romney holds retreat in Uta Verdict reached in Sandusky daughter marries partner; N Egypt; none of the above (in	Response options: Supreme Court rules on [federal ealth care legislation / Arizona immigration law]; Ann Curry leaves the Today Show; Red Sox trade Youkilis; Romney holds retreat in Utah for major donors; Verdict reached in Sandusky trial; Dick Cheney's laughter marries partner; New president elected in Egypt; none of the above (in random order)		
	Sometimes news stories con- tain lots of details, many of which are hard to remem- ber and understand. We are interested in what you may know of the Supreme Court ruling on the federal health care law. Please indicate what you remember.	Sometimes news stories con- tain lots of details, many of which are hard to remem- ber and understand. We are interested in what you may know of the Supreme Court ruling on Arizona's immi- gration legislation. Please indicate what you remem- ber.		
Q2: Knowledge <sup><math>b</math></sup>	The Court held that it is?	The Court held that it is?		
	<u>Constitutional</u> for the fed- eral government to require all Americans to purchase health insurance.	<u>Constitutional</u> for U.S. states to require police to investigate the immigration status of anyone they stop or arrest, based on "rea- sonable suspicion" that the person is in the country unlawfully.		

Time 2 questions and response options (cont. next page)

 $^a$  Options were randomly ordered.  $^b$  Respondents were only asked Q2 (Knowledge) if they indicated in Q1 that they saw the Court headline.

	Health care	Immigration	
	Not constitutional for the	Not constitutional for U.S.	
	federal government to re-	states to require police to	
	quire all Americans to pur-	investigate the immigration	
	chase health insurance.	status of anyone they stop or arrest, based on "reason- able suspicion" that the per- son is in the country unlaw- fully.	
	Don't remember the details of the Court ruling	Don't remember the details of the Court ruling	
Q3: Opinion	Do you support or oppose federal legislation requiring all Americans to purchase health insurance?	Do you support our oppose state laws requiring police to investigate the immigra- tion status of any person during a traffic stop, based on "reasonable suspicion" that the person is in the country unlawfully?	
	Response options: strongly support, somewhat support, neither support nor oppose, somewhat oppose, strongly oppose	Response options: strongly support, somewhat support, neither support nor oppose, somewhat oppose, strongly oppose	
	How much confidence do you yourself have in the		
	United States Supreme Court?		
Q4: Trust	•		
	Response options: a great deal of confidence, only some confidence, hardly any confidence		

Time 2 questions and response options (cont.)

	Health care	Immigration
Reminder 1: Ruling only	The Supreme Court re- cently upheld a key provi- sion of the federal health care legislation. It held that <i>it is constitutional</i> for the federal government to re- quire all Americans to pur- chase health insurance.	The Supreme Court re- cently upheld a key provi- sion of Arizona's immigra- tion legislation. It held that <i>it is constitutional</i> for U.S. states to require police to investigate the immigration status of any person dur- ing a routine traffic stop, based on "reasonable suspi- cion" that the person is in the country unlawfully.
Reminder 2: Ruling + argument in	The Supreme Court re- cently upheld a key provi- sion of the federal health care legislation. It held that <i>it is constitutional</i> for the federal government to re- quire all Americans to pur- chase health insurance.	The Supreme Court re- cently upheld a key provi- sion of Arizona's immigra- tion legislation. It held that <i>it is constitutional</i> for U.S. states to require police to investigate the immigration status of any person dur- ing a routine traffic stop, based on "reasonable suspi- cion" that the person is in the country unlawfully.
support	Many justices on the Court accepted that the govern- ment can require people to buy health insurance, so that people with health in- surance don't have to subsi- dize people without it.	Liberal and conservative justices unanimously agreed that state police officers can conduct these immigra- tion status checks without interfering with federal laws, and that state and federal officials <i>must often</i> <i>work together</i> to enforce immigration laws.

Experimental reminder wordings (cont. next page)

	Health care	Immigration
	Health care The Supreme Court re- cently upheld a key provi- sion of the federal health care legislation. It held that <i>it is constitutional</i> for the federal government to re- quire all Americans to pur- chase health insurance.	Immigration The Supreme Court re- cently upheld a key provi- sion of Arizona's immigra- tion legislation. It held that <i>it is constitutional</i> for U.S. states to require police to investigate the immigration status of any person dur- ing a routine traffic stop, based on "reasonable suspi- cion" that the person is in the country unlawfully.
Reminder 3: Ruling + argument in support + argument against	Many justices on the Court accepted that the govern- ment can require people to buy health insurance, so that people with health in- surance don't have to subsi- dize people without it.	Liberal and conservative justices unanimously agreed that state police officers can conduct these immigra- tion status checks without interfering with federal laws, and that state and federal officials must often work together to enforce immigration laws.
	However, other justices ar- gued that the federal gov- ernment should not be able to force Americans to buy a product they do not wish to buy.	However, the justices dis- agreed about the risks these immigration status checks could involve. Some Jus- tices worried that state police might unnecessarily prolong detentions and vio- late people's rights. They warned state police officers to respect civil rights and civil liberties or face further challenges.

Experimental reminder wordings (cont.)

## 2 Opinion means

Figures 1 and 2 below show the mean overall respondent opinion for each study, as well as the means broken out by Wave 2 treatment assignment (control group, Reminder 1, 2, or 3). Respondents indicated their agreement with the opinion question on a five-point scale, from strongly support (1) to strongly oppose (5), with the option to say "neither support nor oppose" (3). The full survey wording is in Section 1 of this Appendix. Lower means represent more support; thus, means in Wave 2 to the left of means in Wave 1 indicate that group became more supportive of the provision after the Court ruling.



Figure 1: Respondent opinions, health care, pre- (Wave 1) and post-decision (Wave 2)

Question: "Do you support or oppose federal legislation requiring all Americans to purchase health insurance?"



Figure 2: Respondent opinions, immigration, pre- (Wave 1) and post-decision (Wave 2)

Question: "Do you support our oppose state laws requiring police to investigate the immigration status of any person during a traffic stop, based on "reasonable suspicion" that the person is in the country unlawfully?"

Our dependent variable takes three values, following prior scholars' work on Court rulings and public opinion (e.g. Egan and Citrin 2011). It does not differentiate, for example, between someone who moved from strongly oppose to somewhat oppose and someone who moved from somewhat oppose to somewhat support – the outcome variable for both respondents would be a 1, as both increased their support. The majority of respondents who changed their opinion between Wave 1 and Wave 2 did so by only one point on the scale. Our results are largely similar when, instead, we use a 9-point scale to capture change over time, so we use the 3-point scale for comparability with existing literature.

### 3 News media environment

#### 3.1 Evening news coverage of the Court rulings

Table A1 lists the opening lines about the health care ruling and the immigration ruling from each of the six networks in our study (ABC, CBS, NBC, CNN, Fox News, and MSNBC). Here, we can see the coverage of the health care ruling was clear and straightforward, while the immigration coverage was much more confusing. A viewer could reasonably have misunderstood that the "papers" provision had been upheld, even if she had paid attention to the news.

#### **3.2** Associated Press coverage of the Court rulings

Table A2 also shows the headlines from stories sent out by the Associated Press; newspapers and other media outlets often base their coverage on AP wires. The health care ruling was presented much more clearly than the immigration ruling, which featured headlines talking about "victories" as well as "mixed verdicts."

	Health care	Immigration
ABC	"The US Supreme Court has said the Obama health care law is <u>constitutional</u> and therefore the law of the land."	"The court said Arizona police can officially demand proof from the people they pull over, proof that they are in this country legally This is the opinion something of a split decision really."
CBS	"Tonight, health care reform is the <u>law of the land</u> ."	"The justices unanimously upheld the law's most controversial provision, giving Arizona greater authority to identify illegal immigrants in its state."
NBC	"The court <u>upheld</u> the Obama health care law today."	"But today came the other major decision of this late term when the court <u>struck down</u> some key portions of that controversial law in Arizona meant to crack down on illegal immigration."
CNN	"A <u>divided</u> Supreme Court hands President Obama a major victory The health care law <u>stands</u> ."	"The Supreme Court <u>throws out</u> several provisions of Arizona's tough law, but <u>lets stand</u> its most controversial enforcement tool."
FNC	"The heart of the law requiring Americans to have health insurance was <u>upheld after a 5-4 ruling</u> with Chief Justice John Roberts leading the majority."	"The high court <u>struck down</u> key provisions of the law, but the most debated portion, the show-me-your-papers requirement was <u>upheld</u> ."
MSNBC	"For the next hour, we'll cover all parts of the Supreme Court's momentous decision to <u>uphold</u> President Obama's health care law."	"We're back on Politics Nation with the pivotal decision handed down by the Supreme Court today striking down most of Arizona's harsh anti-immigrant law."

Table A1: Evening news descriptions of the Court rulings

Emphasis added by authors.

Health care	Immigration
"Health care ruling a political victory	"Ariz. gov: ruling a 'victory' for all
for Obama"	Americans"
"High court upholds key part of	"Reid: Court ruling paves path to
Obama health law"	racial profiling"
"High court upholds Obama health	"Group: Court ruling on Ariz. law
law"	invites lawsuits"
"Boehner: Health ruling shows need	"Obama offers mixed verdict on
to repeal law"	immigration ruling"
"Romney: Supreme Court ruling on	"Romney: States have right to secure
health law wrong"	their borders"
"Obama calls Supreme Court ruling a	"High court rejects part of Arizona
'victory"'	immigration law"
"High court ruling benefits most	"Romney says immigration law has
health care niches"	become a 'muddle"'

Table A2: Associated Press headlines on the day of the Court decisions

#### 3.3 The volume of media coverage of these cases

We counted the number of *New York Times* stories in the six weeks before and after oral arguments and Court rulings in 28 prominent Supreme Court cases, beginning with Brown v. Board in 1954. The health care case, *Florida v. HHS*, was the focus of 335 stories during this twelve-week span, the most of any of the 28 cases (second was *Bush v. Gore* with 273 stories). More recently, the 2015 same-sex marriage ruling (*Obergefell v. Hodges*) was the focus of 137 stories over the same 12-week period.

The six evening news programs in our study – ABC World News, CBS Evening News, NBC Nightly News, CNN's John King, Fox News Special Report, and MSNBC Politics Nation – spent an average of 79% of their time that evening discussing the health care ruling. The range was from 62% (ABC) to 97% (MSNBC). These measures were calculated using the total number of words about the ruling divided by the total number of words in the entire show, as counted by our coders.

The immigration case, Arizona v. US received the eighth-most attention of these stories, with 62 over the same time span. This amount of coverage was comparable to that of other prominent major Court cases, such as Grutter v. Bollinger (77 stories), Planned Parenthood v. Casey (68 stories), and Regents v. Bakke (59 stories). On the day of the ruling, the evening news programs in our study devoted an average of 46% of their time to the immigration decision: from 21% (MSNBC) to 70% (CNN).

The amount of attention devoted to the health care case, relative to the immigration case, meant that more respondents were likely to have been pre-treated; this is even more likely to be true, given the clarity of the health care coverage and the reasonably confusing coverage following the immigration ruling (as explained in the main text, and illustrated with the opening Court coverage lines from the evening news programs, shown in main text Table 1).

#### 3.4 Coverage of the health care dissent

While most respondents in our study had heard that the Court had upheld the individual mandate, very few were likely to have heard about the dissenting opinion. Of the six networks in our study, less than two percent of the total time devoted to the health care ruling discussed the dissent as such, with two networks (NBC and MSNBC) not discussing it at all. CBS gave the most time to the dissent, at 5.2% of coverage, but gave 19.3% to the majority opinion.

When we broaden our measure from discussion of the dissent as such, to the

discussion of the main argument flagged by the dissenting justices – the potential for government overreach, the piece of the dissent emphasized in our experiment – was 7.3% on average, ranging from about 12.3% on CBS to under 1% of the time on MSNBC. When we further broaden our measure to any critical coverage of the health care decision, including frames, for example, that the individual mandate functioned as a tax, we still found that the average time spent on negative coverage of the ruling was 15% of all discussion about the Court's ruling (Fox News spent the most time on negative coverage, at 29.6%; the average drops to 12.1% when we consider only the other five networks). Most networks gave one-sided positive coverage, and even Fox News did not spent a majority of its time criticizing the ruling.

It is not surprising, therefore, that even particularly well-informed respondents may have learned about the dissent for the first time from our experiment, and that this new, surprising information caused them to respond accordingly.

### 3.5 Our respondents' news consumption

Our respondents' reported news consumption lines up with other data from the time of our survey. Our measures of news consumption came from a YouGov question that asked respondents which evening news programs they typically watched (Table A3).

Together, about half of our respondents report watching at least one of these six networks (50.4% for health care and 49.1% for immigration), which is consistent with data from Pew (2010). 2012 data from Pew (2015) also show that about three times as many people watch Fox News, compared to CNN and MSNBC, which is

Network	Health care	Immigration
ABC	15.5	15.4
CBS	8.8	9.8
NBC	16.2	17.2
CNN	6.1	6.3
FNC	16.8	18.5
MSNBC	7.1	7.0

Table A3: Percent of respondents reporting watching evening news, by channel

consistent with our dataset. In early 2013, Pew (2013) reported that 71% of adults get news from local television programs, and 76% of our respondents say they do so.

### 4 Models without controls

Our main-text models include a set of demographic control variables: party identification, race, gender, education, age, employment status, and marital status. Some of these control variables could be correlated with an individual's pre-treatment status (e.g. someone with a high level of education may be more likely to be in the pre-treated group than someone with a low level of education); control variables also help us with the over-reporting problems discussed in Prior (2009, 135-7). As a robustness check, Tables A4 and A5 present the main-text models (Tables 1 and 2) without these control variables included. Results are very similar when we exclude controls.

These control variables came from YouGov, which fielded the surveys. Party identification was a 7-point measure from the time of our Wave 1 survey. We grouped leaners with partisans, and used a control variable for Republicans (vs. Democrats and independents). We included dummy variables for race for respondents who selfidentified as black or Hispanic, as well as dummy variables for male respondents, married respondents, and respondents with full-time employment (all, again, from YouGov's set of demographic variables). Age was used as a continuous dummy variable. We broke education into the six levels provided from YouGov (ranging from no high school diploma to a post-graduate degree), and included five dummy variables for education (using post-graduate as the baseline).

		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.02	0.26	-0.01
(decision)	(0.05)	(0.25)	(0.05)
Reminder 2	0.01	0.32*	-0.02
(+ majority)	(0.05)	(0.17)	(0.06)
Reminder 3	-0.09	0.01	-0.10*
(+  dissent)	(0.06)	(0.21)	(0.06)
	N = 1000	N = 86	N = 914
*** $p < 0.01$ , ** $p$	< 0.05, * p < 0.10		

Table A4: No-controls model: Opinion change, health care (compare to main text Table 1)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders. These models do not include control variables (see Table 1 in the main text for the model with controls).

Pre-treated individuals are distinguished based on their awareness of news headlines (here, anyone who saw one or more of seven recent headlines is classified as pre-treated; see explanation in the main text).

		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.08	0.08	0.11
(decision)	(0.05)	(0.06)	(0.08)
Reminder 2	0.13 * *	0.15 * *	0.10
(+ majority)	(0.06)	(0.08)	(0.08)
Reminder 3	0.12 * *	0.10	0.14*
(+  concurrence)	(0.06)	(0.07)	(0.08)
	N = 1000	N = 624	N = 376
*** $p < 0.01$ , ** $p < 0.05$ , * $p < 0.10$ , + $p = 0.10$			

Table A5: No-controls model: Opinion change, immigration (compare to main text Table 2)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders. These models do not include control variables (see Table 2 in the main text for the model with controls).

Pre-treated individuals are distinguished based on their awareness of news headlines (here, anyone who saw at least five of seven recent headlines is classified as pre-treated; see explanation in the main text).

### 5 Models with interactions

In the main text, we separate the pre-treated and not pre-treated groups, running our models on each group separately. An alternative method of analysis would have been to use interaction terms on the full sample, rather than splitting the sample, and we do so here. Our results are robust when using interaction terms. Table A6 runs interactions for the health care study (see Table 1 in the main text), Table A7 runs interactions for the immigration study (see Table 2 in the main text), and Table A8 focuses on the pre-treated group from the immigration study to consider the effect of clarity (see Table 3 in the main text). For ease of comparison with the main text, we have presented these tables in the same way (with columns for the overall effect, pre-treated respondents, and non-pre-treated respondents), instead of presenting all interactions in one column and all coefficients in another.

All of these results are consistent from when we use interactions to when we separate the sample into two groups. As in Table 1 in the main text, the first column in Table A6 ("Overall effect") suggests exposure to information that the Court upheld a law either makes no difference or, in fact, reduces support for the law. Instead, when we identify respondents who were hearing this information for the first time (not pre-treated group), we see that they increased their support for the individual mandate.

We also see similar patterns in the immigration study, comparing the interaction models (Tables A7 and A8) to the main text. Specifically, Table A8, replicating main text Table 3, highlights that pre-treatment effects are largest among people receiving clear and one-sided information from the media. In contrast, people receiving unclear

		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.01	0.26	-0.02
(decision)	(0.05)	(0.25)	(0.05)
Reminder 2	0.01	0.36 * *	-0.03
(+ majority)	(0.05)	(0.18)	(0.06)
Reminder 3	-0.09*	0.01	-0.11*
(+  dissent)	(0.05)	(0.21)	(0.06)
	N = 1000	N = 1000	N = 1000
*** $p < 0.01$ , ** $p$	< 0.05, * p < 0.10		

information are more likely to respond to the experimental reminders.

Table A6: Interaction model: Opinion change, health care (compare to main text Table 1)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

Pre-treated individuals are distinguished based on their awareness of news headlines (here, anyone who saw at least one of seven recent headlines is classified as pre-treated; see explanation in text). The models interact each level of the treatment – no reminder, reminder only (R1), reminder + argument from the majority (R2), reminder + argument from the majority and from the dissent (R3) – with pre-treatment status.

		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.08	0.08	0.09
(decision)	(0.05)	(0.06)	(0.08)
Reminder 2	0.13 * *	0.15 * *	0.09
(+ majority)	(0.06)	(0.07)	(0.08)
Reminder 3	0.12 * *	0.12	0.14*
(+  concurrence)	(0.06)	(0.07)	(0.08)
	N = 1000	N = 1000	N = 1000
*** $p < 0.01$ , ** $p$	< 0.05, * p < 0.10		

Table A7: Interaction model: Opinion change, immigration (compare to main text Table 2)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

Pre-treated individuals are distinguished based on their awareness of news headlines (here, anyone who saw at least five of seven recent headlines is classified as pre-treated; see explanation in text). The models interact each level of the treatment – no reminder, reminder only (R1), reminder + argument from the majority (R2), reminder + argument from the majority and from the concurrence (R3) – with pre-treatment status.

		News media exposure	
Exposure from	One-sided,	Two-sided,	Two-sided,
$\operatorname{experiment}$	clear	clear	unclear
Reminder 1	0.11	0.19	0.19
(decision)	(0.11)	(0.14)	(0.23)
Reminder 2	0.15	0.22	0.33*
(+ majority)	(0.10)	(0.15)	(0.19)
Reminder 3	0.10	0.18	0.51 * *
(+  concurrence)	(0.10)	(0.17)	(0.23)
	N = 272	N = 272	N = 272
*** $p < 0.01$ , ** $p$	< 0.05, * p <	0.10	

Table A8: Interaction model: Opinion change among pretreated group by information clarity and frames, immigration (compare to main text Table 3)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

The models interact each level of the treatment – no reminder, reminder only (R1), reminder + argument from the majority (R2), reminder + argument from the majority and from the concurrence (R3) – with a dummy variable for clarity/frames (clear/one-sided, clear/two-sided, unclear/two-sided).

## 6 Our measures of pre-treatment

Our pre-treatment measures in the text are derived from respondent's answers on a news attentiveness question, where they indicated which, if any, news headlines they remembered seeing in the past few days (the full text of this question is included in Section 1 of this Appendix). Although self-reported measures of exposure may be subject to over-reporting (Prior 2009), the mean number of headlines checked was 3.6 for health care and 3.3 for immigration, alleviating concern that respondents want to appear knowledgeable by checking most or all of the headlines. Including demographic controls in our models helps us further, should tendencies to over-report exposure vary by demographic factors, as Prior (2009, 137) finds.

Although one of the seven headlines in our studies mentioned about the Supreme Court ruling (only that the Court had ruled, not the direction of the ruling), we do not use this as our measure of pre-treatment. This would be a more direct measure of recall, but we are concerned that it would introduce bias into our results, particularly in the complicated and confusingly covered immigration case. In our Study 2, opponents of the "papers" provision were much more likely than proponents to misremember the holding, and remember (incorrectly) that the court had struck down this provision. Biased recall of the Supreme Court decision overlaps significantly with political ideology and opinion at Time 1, but is something for which we cannot fully account with control variables.

Therefore, we use an indirect measure of exposure. Our goal in doing so is to separate out the groups of people who were most likely to have been paying attention to the news the week of the Court rulings – not the group that remembered which way the Court had ruled. Our thresholds are robust to alternative methods of separating pre-treated individuals from non-pre-treated individuals, as Section 7 of this Appendix shows.

The "gold standard" for studying pre-treatment would be a direct measure of respondents' exposure to news. There are potential concerns with using an indirect measure, as it is noisier than a direct measure would be. With our measure, specifically, it might be the case that people who saw the sports headline (about the Red Sox) did not necessarily see news about politics or the Court, specifically. We have run several robustness checks to make sure that our results hold up to diverse indirect measures of exposure (in the next section of this Appendix).

Another potential problem with an indirect measure is that the people who remember a particular story may be a non-random subset of the people who were exposed to it, and these people may be more or less receptive to new political information than other people would be. That said, we believe that our providing messages at random in the experiment lessens these concerns, as these messages will be recalled by, presumably, a less-biased subset.

Although a direct measure would be ideal, such a measure is not feasible in this study. Despite the concerns with indirect measures, our measure is an improvement over prior measures. Unlike prior measures, which ask how often people read or watch the news, our measure involves recall of specific stories, which lessens concerns about respondents over-reporting the amount of news they consume (e.g. Prior 2009).

### 7 Models with alternative thresholds

The main text uses questions about exposure, rather than knowledge, to separate respondents who were pre-treated from those who were not (here, we follow Druckman and Leeper 2012, who also use exposure to divide respondents). We divided the sample using a question about recent news headlines, in which respondents were asked to check the headlines they saw. The widespread and clear coverage of the health care ruling, compared to the less-widespread (but still prominent) and less-clear coverage of the immigration ruling, means that different thresholds were appropriate for the two studies. In this section, we use alternative pre-treatment thresholds that restrict the pre-treated groups further than in the main text: from about 90% of the health care sample to about 85%, and from about 35% of the immigration sample to about 15%.

As in the main text, pre-treatment problems are smallest when media information is both unclear and two-sided, larger when media messages are unclear and one-sided, and even larger when the messages are clear and one-sided; these results are tentative.

#### 7.1 Health care (Study 1) thresholds

Because coverage was so widespread, we needed a measure that would separate out the vast majority of respondents, who had likely been exposed to the health care news, from the minority who were unlikely to have heard. The main text threshold used the most generous headline measure available (classifying as pretreated anyone who indicated seeing at least one out of seven headlines), so, here, we use an alternative question. We found that a very small fraction of people (15% of our health care sample) reported having very low levels of political interest, and thus used this classification as a robustness check (anyone indicating "high" or "some" political interest is classified as pre-treated). We hypothesized that people with very low political interest might not have heard about the health care ruling prior to our experiment.

This alternative threshold produces the same results as our main text (Table 1). Looking only at the aggregate results in Table A9 ("Overall effect"), we would think exposure to information about the health care ruling actually reduced support for the individual mandate. When we instead consider only the not pre-treated group, we see that support for the individual mandate increased after this group received information about the ruling.

Two additional robustness checks address potential concerns introduced by classifying anyone who saw at least one headline as pre-treated: We adjusted the threshold to classify as pre-treated, first, anyone who saw at least one headline other than the Supreme Court headline, and second, anyone who saw at least one headline other than the sports headline (about the Red Sox). The former is a way to measure respondents' attentiveness to news, generally, while remaining agnostic about whether they reported seeing the Court headline, and results are consistent with the maintext results (Table A10). The latter allows us to account for people who reported only seeing sports news not necessarily being aware of political news (though there was only one respondent in the health care study who reported seeing the Red Sox headline and no others). These results are in Table A11 and are again consistent

		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.01	0.30*	-0.05
(decision)	(0.05)	(0.18)	(0.06)
Reminder 2	0.01	0.34 * *	-0.05
(+ majority)	(0.05)	(0.14)	(0.06)
Reminder 3	-0.09*	0.06	-0.10*
(+  dissent)	(0.05)	(0.14)	(0.06)
	N = 1000	N = 141	N = 857
*** $n < 0.01$ ** $n$	< 0.05 * n < 0.10		

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10

Table A9: Alternative threshold 1: Opinion change, health care (compare to main text Table 1)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

Pre-treated individuals are distinguished based on their awareness of news headlines. In the main text, anyone in the health care study who saw at least one of seven recent headlines was classified as pre-treated. Here, we use a political interest variable, with anyone who said they had "high" or "some" political interest coded as pre-treated, and anyone who said "not much" or "not sure" coded as not pre-treated.

with the	results	in the	$\operatorname{main}$	text.
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		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.01	0.34*	-0.03
(decision)	(0.05)	(0.19)	(0.05)
Reminder 2	0.01	0.29 * *	-0.04
(+ majority)	(0.05)	(0.14)	(0.06)
Reminder 3	-0.09*	-0.08	-0.10*
(+  dissent)	(0.05)	(0.16)	(0.06)
	N = 1000	N = 123	N = 877
*** $p < 0.01$ , ** $p$	< 0.05, * p < 0.10		

 $p < 0.01, \quad p < 0.00, \quad p < 0.10$ 

Table A10: Alternative threshold 2: Opinion change, health care (compare to main text Table 1)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

Pre-treated individuals are distinguished based on their awareness of news headlines. In the main text, anyone in the health care study who saw at least one of seven recent headlines was classified as pre-treated. Here, we include as pre-treated only respondents who reported seeing at least one of the six headlines other than the Supreme Court headline.

		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.01	0.42*	-0.01
(decision)	(0.05)	(0.22)	(0.05)
Reminder 2	0.01	0.40 * *	-0.02
(+ majority)	(0.05)	(0.18)	(0.06)
Reminder 3	-0.09*	-0.04	-0.10*
(+  dissent)	(0.05)	(0.21)	(0.06)
	N = 1000	N = 87	N = 913
*** $p < 0.01$ , ** $p$	< 0.05, * p < 0.10		

Table A11: Alternative threshold 3: Opinion change, health care (compare to main text Table 1)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

Pre-treated individuals are distinguished based on their awareness of news headlines. In the main text, anyone in the health care study who saw at least one of seven recent headlines was classified as pre-treated. Here, we include as pre-treated only respondents who reported seeing at least one of the six headlines other than the sports (Red Sox) headline.

#### 7.2 Immigration (Study 2) thresholds

The real-world coverage of the immigration ruling was less-widespread and lessclear than the health care ruling's coverage. We used a higher threshold for pretreated individuals in our immigration study (vs. our health care study), as a result, and do so again here. In the main text, individuals were classified as pre-treated if they indicated seeing five or more of seven recent news headlines. As an alternative, we classify as pre-treated anyone who anyone who saw all three of our political headlines (about the Egyptian elections, a Romney donor retreat, and a story about Dick Cheney's daughter). We anticipated that some people may pay attention to pop culture or non-political news, but not political news, and vice versa, leading to our selection of the alternative measure. This restricts the pre-treated group to about 15% of the sample, compared to about 35% in the main text coding.

Using exposure, rather than awareness, is even more crucial for the immigration study than for the health care study. Respondents who supported the immigration provision before the Court decisions were more likely to believe, incorrectly, that it had been upheld; the reverse was true for people who initially opposed the provision. 55% of our pre-treated immigration group supported or strongly supported the "papers" provision in Wave 1, compared to 56% of our not pre-treated group. When we instead use knowledge of the decision (said provision had been upheld, vs. said it had not or said they did not know), 70% of our pre-treated group supported or strongly supported the provision, compared to 35% of our not pre-treated group.

With this alternative threshold of exposure (Table A12), the overall effect mirrors that of the not pre-treated group. As in the main text (Table 2), looking only at the

overall effect would lead us to conclude that the information presented in our study moved opinion among both pre-treated and not pre-treated individuals, when only the latter is true. People who received information from our study, and had already been exposed to this information, did not further move their opinions.

		News media exposure	
Exp. treatment	Overall effect	Not pre-treated	Pre-treated
Reminder 1	0.08	0.10*	-0.05
(decision)	(0.05)	(0.06)	(0.10)
Reminder 2	0.13 * *	0.13 * *	0.17
(+ majority)	(0.06)	(0.06)	(0.13)
Reminder 3	0.12 * *	0.14 * *	0.11
(+  concurrence)	(0.06)	(0.06)	(0.10)
	N = 1000	N = 831	N = 169
*** $p < 0.01$ , ** $p$	< 0.05, * p < 0.10		

Table A12: Alternative threshold: Opinion change, immigration (compare to main text Table 2)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

Pre-treated individuals are distinguished based on their awareness of news headlines. In the main text, anyone in the health care study who saw at least five of seven recent headlines was classified as pre-treated. Here, we code anyone who saw all three political headlines (about the Egyptian elections, a Romney donor retreat, and a story about Dick Cheney's daughter) as pre-treated, and anyone who saw two or fewer of those headlines as not pre-treated.

## 8 Full models from main text

Tables A13 and A14 present the full models summarized in Tables 1 and 2 in the main text, covering health care and immigration, respectively. The main text tables show the coefficients for the experimental reminders, only, while these tables show all of the control variables, as well.
		News media exposure		
Exp. treatment	Overall effect	Not pre-treated	Pre-treated	
Reminder 1	0.01	0.42*	-0.02	
(decision)	(0.05)	(0.23)	(0.05)	
Reminder 2	0.01	0.40 * *	-0.03	
(+ majority)	(0.05)	(0.18)	(0.06)	
Reminder 3	-0.09*	-0.05	-0.10*	
(+  dissent)	(0.05)	(0.21)	(0.06)	
Republican	-0.16***		-0.19 * *	
-	(0.04)	(0.22)	(0.04)	
Black	0.11*	0.10	0.14**	
	(0.07)	(0.23)	(0.07)	
Hispanic	0.04	0.26	0.02	
	(0.07)	(0.20)	(0.08)	
Male	0.06	0.26	0.03	
	(0.04)	(0.18)	(0.04)	
No high school	-0.37***		-0.39**	
ito ingli senooi	(0.12)		(0.14)	
High school	-0.12*	0.17	-0.10	
	(0.07)	(0.22)	(0.07)	
Some college	-0.16 **	-0.01	-0.12	
Some conege	(0.08)	(0.21)	(0.08)	
2-year college	-0.03	0.49	-0.04	
2 year conege	(0.09)	(0.38)	(0.09)	
4-year college	-0.02	0.24	-0.01	
+ year conege	(0.02)	(0.27)	(0.07)	
Married	-0.02	-0.09	-0.03	
Married	(0.02)	(0.16)	(0.04)	
Employed FT	-0.03	0.04	-0.05	
Employed P1	(0.03)	(0.20)	(0.04)	
Age	0.00	(0.20) -0.00	0.00	
11gc	(0.00)	(0.01)	(0.00)	
Constant	(0.00) 0.15	(0.01) -0.50	(0.00) 0.23**	
Constant			(0.23**	
	$\frac{(0.10)}{N = 1000}$	$\frac{(0.30)}{N = 86}$	(0.11) N = 914	
*** $p < 0.01$ , ** $p$			11 - 314	

Table A13: Full model, opinion change, health care (see main text Table 1)

This table presents the full OLS results from Table 1 in the main text. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change.

		News media exposure		
Exp. treatment	Overall effect	Not pre-treated	Pre-treated	
Reminder 1	0.08	0.08	0.07	
(decision)	(0.05)	(0.06)	(0.08)	
Reminder 2	0.13 * *	0.15 * *	0.09	
(+ majority)	(0.06)	(0.07)	(0.07)	
Reminder 3	0.12 * *	0.12 +	0.13	
(+  concurrence)	(0.06)	(0.07)	(0.08)	
Republican	-0.04	0.01	-0.12 **	
	(0.04)	(0.05)	(0.06)	
Black	-0.05	-0.09	-0.03	
	(0.07)	(0.09)	(0.11)	
Hispanic	-0.16 * *	-0.22**	0.03	
	(0.07)	(0.09)	(0.11)	
Male	0.03	-0.01	0.05	
	(0.04)	(0.06)	(0.06)	
No high school	-0.25 * *	-0.27**	0.04	
Ŭ	(0.10)	(0.13)	(0.23)	
High school	-0.11	-0.06	-0.14	
-	(0.07)	(0.12)	(0.09)	
Some college	-0.06	-0.05	-0.05	
-	(0.08)	(0.12)	(0.10)	
2-year college	-0.08	-0.03	-0.13	
	(0.10)	(0.14)	(0.14)	
4-year college	-0.07	-0.07	-0.05	
	(0.08)	(0.13)	(0.09)	
Married	-0.02	-0.03	-0.01	
	(0.04)	(0.05)	(0.07)	
Employed FT	0.03	0.01	0.01	
	(0.04)	(0.06)	(0.06)	
Age	-0.00	-0.00	-0.00	
	(0.00)	(0.01)	(0.00)	
Constant	0.25**	0.22	0.40**	
	(0.11)	(0.15)	(0.17)	
	N = 1000	N = 624	N = 376	
*** $p < 0.01$ , ** $p < 0.01$	< 0.05, * p < 0.10,	+ p = 0.10		

Table A14: Full model, opinion change, immigration (see main text Table 2)

This table presents the full OLS results from Table 2 in the main text. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change.

## 9 One- and two-sided news coding

Analyzing the clarity of real-world news messages (see Study 2 in the main text) presents a challenge, because message clarity has not been experimentally assigned, and could thus be impacted by other important factors. One major factor that could confound our results is the degree to which a news program supports (or is critical of) the Court ruling. To explore this, we further divided clear and unclear coverage into two categories, one-sided coverage and two-sided coverage, based on the degree to which the program criticized or supported the immigration ruling (see [author] for further analysis using these codings).

To determine whether evening news programs offered one- or two-sided coverage of the immigration case, we first identified frames from the morning, afternoon, and late night news programs on the six networks (ABC, CBS, NBC, CNN, Fox News, MSNBC) for the decision. This generated a list of six frames: racial profiling, Court partisanship, immigration reform, federalism, crime, and border security. Next, two student coders read the six evening news transcripts on these networks and counted the number of words devoted to each frame.

Our next step was to determine whether frames were used in a positive, negative, or mixed way. Coders were trained using news transcripts from the non-evening news programs. They then evaluated the evening news transcripts, sentence by sentence, classifying each sentence, or portion thereof, in two ways: the valence of the text and the frame which it evoked. Valences were either positive (supportive of the Court ruling), negative (opposed to the Court ruling), or neutral (a sentence that is neither, such as "Majority Leader Harry Reid spoke about the ruling today"). Coders were provided with the six frames – previously identified using the morning, afternoon, and late-night news about the rulings – and asked to determine whether the sentence fit one of the six frames, or could be classified as general commentary (e.g. "The Court ruled today on Arizona's immigration law"). Our coders then totaled the total number of positive, negative, and neutral words belonging to each of the six frames for all transcripts.

We then summed the total number of positive and negative words for each Court decision's frame across the six networks, and then calculated the percentage of positive words used. For example:

(Positive words: "racial profiling" frame ABC + CBS + NBC + CNN + FNC + MSNBC) / (Total words: "racial profiling" frame ABC + CBS + NBC + CNN + FNC + MSNBC)

If this percentage exceeded 75%, we classified that frame as "positive." If the percentage was below 25%, we classified that frame as "negative," and percentages between 25-75% were classified as "mixed." For the immigration case, two frames were classified as negative (racial profiling and Court partianship), two as mixed (immigration reform and federalism), and two as positive (crime and border security).

Next, we combined the frame direction and frame usage counts to make an overall determination of whether a network's coverage was one-sided or two-sided, as follows. If non-negative frames comprised at least 65% of the network's total frame usage, we classified the network as one-sided, and if that threshold was not reached, we classified the network as two-sided. For example, if this percentage was calculated to be 65% or greater, the network would be coded as a one-sided program:

(Total words used on ABC: crime + border security + reform + federalism) / (Total words used on ABC: racial profiling + partisanship + crime + border security + reform + federalism)

We pooled mixed and positive frames for the immigration ruling, as negative usage of the two mixed frames – immigration reform and federalism – was overwhelmingly critical of the federal government, rather than the Court. Positive usage of these frames was supportive of the Court, so we consider the non-negative frames together to give the most accurate interpretation of the evening news transcripts.

We followed the procedure used in Chong and Druckman (2011) to determine whether our coders agreed about the presence of frames in a given transcript. We found 93.1% agreement about presence (or near total absence) of frames, and a Krippendorf's alpha of 0.85. This measure takes a more conservative estimate of inter-coder reliability, allowing some agreement by chance. As we were also interested in the amount of negative coverage in each transcript, we also determined the intercoder agreement about the percentage of negative frames, again following Chong and Druckman. Our alpha for percentage of negative frames in each transcript was 0.94. These results meet and perhaps exceed typical standards of inter-coder reliability.

# 10 Clear and unclear coverage

#### 10.1 How respondents were classified

For immigration, four networks were determined by our coders to have covered the ruling clearly – ABC, CBS, Fox News, and CNN – while two did so in an unclear way, such that viewers could reasonably have misunderstood that the "papers" provision had been upheld – NBC and MSNBC. As noted in the main text, if pretreated respondents in the immigration study were exposed to both clear and unclear coverage, we coded them as receiving clear coverage, with the expectation that this would dominate over the unclear information received from either NBC or MSNBC.

Our results do not hinge on this decision, however, as we show in Table A15 below. When we instead classify these respondents as having received unclear coverage, the results are largely consistent with Table 3 in the main text.

#### 10.2 Clarity without one- and two-sided coverage divisions

Table A16 divides pre-treated respondents from the immigration study into two groups: those who received clear information, and those who received unclear information. It is similar to main text Table 3, though that table also divides respondents by one- and two-sided information.

### 10.3 Exposure to other sources of news

Our pre-treated respondents may have been exposed to messages about the immigration ruling that came from sources other than the major evening news programs

	News media exposure			
Exposure from	One-sided, Two-sided, Two		Two-sided,	
experiment	clear	clear	unclear	
	(CBS, FNC)	(ABC, CNN)	(MSNBC, NBC)	
Reminder 1	0.04	0.34**	0.11	
(decision)	(0.12)	(0.16)	(0.17)	
Reminder 2	0.10	0.27	0.28 * *	
(+ majority)	(0.11)	(0.19)	(0.14)	
Reminder 3	0.09	0.06	0.48 * * *	
(+  concurrence)	(0.10)	(0.19)	(0.16)	
	N = 109	N = 51	N = 112	
*** $p < 0.01$ , ** $p < 0.05$ , * $p < 0.10$				

Table A15: Alternative coding: Opinion change among pre-treated group by information clarity and frames, immigration (see main text Table 3)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

If respondents reported watching both a clear and an unclear news program, here, they are coded as receiving unclear coverage (vs. in the main text, where they are coded as receiving clear).

	News media exposure			
Exposure from	Clear	Unclear		
experiment	(ABC, CBS, CNN, FNC)	(MSNBC, NBC)		
Reminder 1	0.15*	0.19		
(decision)	(0.09)	(0.27)		
Reminder 2	0.20*	* 0.40**		
(+ majority)	(0.09)	(0.20)		
Reminder 3	0.14	0.62 * *		
(+  concurrence)	(0.09)	(0.26)		
	N = 215	N = 57		
*** $p < 0.01$ , ** $p$	0 < 0.05, * p < 0.10			

Table A16: Opinion change among pre-treated group by clarity of real-world information, immigration

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include control variables (party ID, race, gender, education, age, employment status, marital status).

in our study – namely, local news programs and local papers. Newspapers, in particular, might be more likely to provide detailed analysis of Court cases (relative to national evening television news). If so, these other sources could change the effect of message clarity (from main text Table 3).

To account for this, we ran our model from Table 3 with control variables for respondents' reported frequency of local television and newspaper consumption (from 0-7 days per week, in an average week). Our results are consistent with these alternative models, lessening concern about the influence of these other sources of news on pre-treatment.

	News media exposure				
Exposure from	One-sided, Two-sided,		Two-sided,		
experiment	clear	clear	unclear		
	(CBS, FNC)	(ABC, CNN)	(MSNBC, NBC)		
Reminder 1	0.04	0.11	0.18		
(decision)	(0.11)	(0.13)	(0.27)		
Reminder 2	0.11	0.26 * *	0.42 **		
(+ majority)	(0.11)	(0.15)	(0.21)		
Reminder 3	0.08	0.21	0.57 * *		
(+  concurrence)	(0.10)	(0.16)	(0.25)		
	N = 109	N = 106	N = 57		
*** $p < 0.01$ , ** $p < 0.05$ , * $p < 0.10$					

Table A17: Model with local television news variable: Opinion change among pretreated group by information clarity and frames, immigration (see main text Table 3)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include the control variables (party ID, race, gender, education, age, employment status, marital status) from the main text model, as well as a control variable for frequency of local television news consumption (0-7 days per week, on average).

	News media exposure			
Exposure from	One-sided, Two-sided,		Two-sided,	
experiment	clear	clear	unclear	
	(CBS, FNC)	(ABC, CNN)	(MSNBC, NBC)	
Reminder 1	0.06	0.10	0.14	
(decision)	(0.12)	(0.14)	(0.27)	
Reminder 2	0.10	0.26 +	0.46 * *	
(+ majority)	(0.11)	(0.15)	(0.20)	
Reminder 3	0.07	0.21	0.71 * * *	
(+  concurrence)	(0.09)	(0.16)	(0.24)	
	N = 109	N = 105	N = 56	
*** $p < 0.01$ , ** $p < 0.05$ , * $p < 0.10$ , + $p = 0.10$				

Table A18: Model with local newspaper variable: Opinion change among pre-treated group by information clarity and frames, immigration (see main text Table 3)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the no-reminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include the control variables (party ID, race, gender, education, age, employment status, marital status) from the main text model, as well as a control variable for frequency of local newspaper consumption (0-7 days per week, on average).

	News media exposure				
Exposure from	One-sided,	Two-sided,			
experiment	clear	clear	unclear		
	(CBS, FNC)	(ABC, CNN)	(MSNBC, NBC)		
Reminder 1	0.06	0.10	0.11		
(decision)	(0.12)	(0.14)	(0.27)		
Reminder 2	0.11	0.25	0.51 * *		
(+ majority)	(0.11)	(0.16)	(0.20)		
Reminder 3	0.06	0.19	0.66 * * *		
(+  concurrence)	(0.10)	(0.16)	(0.21)		
	N = 109	N = 106	N = 57		
*** $p < 0.01$ , ** $p < 0.05$ , * $p < 0.10$					

Table A19: Model with local television and paper variables: Opinion change among pre-treated group by information clarity and frames, immigration (see main text Table 3)

This table presents OLS results. The dependent variable is the shift in opinion, relative to the noreminder group, from the before- to the after-ruling survey. It takes a value of 1 if opinion became more supportive, -1 if it became more negative, and 0 if there was no change. The main independent variables are our experimental reminders, and the models include the control variables (party ID, race, gender, education, age, employment status, marital status) from the main text model, as well as control variables for frequency of local television news and newspaper consumption (0-7 days per week, on average).

# 11 Reporting Standards for Experimental Research

### A: Hypotheses

The experiment was designed to compare the impact of real-world and experimental messages, using two Supreme Court decisions. It tests three hypotheses, as laid out in the main text:

- 1. *Hypothesis* 1: Pre-treatment can mask true framing effects when researchers and the media provide information with the same valence.
- 2. *Hypothesis* 2: Pre-treatment can produce false positive effects when researchers and the media provide information with the opposite valence.
- 3. *Hypothesis 3*: Clarity can mediate pre-treatment, with clearer information leading to larger pre-treatment effects.

### **B:** Subjects and context

Subjects were recruited through YouGov, which fielded the studies. YouGov recruits participants from its subject pools, and both waves were conducted online.

Both Wave 1s were fielded May 7-16, 2012. Wave 2 began the day after the respective Supreme Court rulings – June 26, 2012 for immigration and June 29, 2012 for health care – and ended July 6.

### C: Allocation method

As explained in Section 1 of this Appendix, individual subjects were randomly assigned to one of four groups in Wave 2; there was no experiment or random assignment in Wave 1.

About 40% of the sample in each study was assigned to the control group (which received no reminder about the Court ruling), and about 20% was assigned to each of the three experimental reminders: Reminder 1 (ruling only), Reminder 2 (ruling + argument from majority), Reminder 3 (reminder + argument from majority + argument from health care dissent / immigration concurrence).

YouGov blocked on race, news interest, and Fox News viewership. Tables A20 and A21 below show the unweighted means in each treatment condition for these and other demographic variables.

% respondents	Control	R1	R2	R3
Black	8.4	11.3	8.7	9.2
Diack	(5.6, 11.2)	(6.9, 15.6)	(4.8, 12.5)	(5.2, 13.1)
Uignonia	(5.0, 11.2) 7.3	(0. <i>3</i> , 15.0) 9.8	(4.8, 12.5) 12.1	(0.2, 10.1) 10.1
Hispanic				
	( ' ' '	( '	(7.6, 16.5)	· · · /
Republican	36.9			40.8
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	(30.6, 43.8)	( , ,
Male	45.0	48.0	48.3	
	(40.0,  50.0)	(41.2, 54.9)	(41.5, 55.1)	(32.5, 45.8)
Some college (or more)	60.2	54.4	52.2	60.9
	(55.3, 65.1)	(47.6, 61.3)	(45.3, 59.0)	(54.2, 67.5)
Married	54.2	51.5	53.1	61.8
	(49.2, 51.2)	(44.6, 58.3)	(46.3, 60.0)	(55.2, 68.5)
Employed FT	36.9	41.7	· · · /	31.9
1 0	(32.1, 41.8)	(34.9, 48.5)	(30.0, 42.8)	(25.5, 38.3)
Age	51.3	· · · · · · · · · · · · · · · · · · ·	( )	49.9
0	(49.8, 52.9)	(49.7, 52.9)	(49.7, 54.0)	(47.8, 52.1)
Fox News viewers	35.1	,		36.7
	(30.3, 39.9)	(30.6, 43.9)	(29.7, 42.8)	(30.1, 43.3)
High news interest	56.0	· · · · · · · · · · · · · · · · · · ·	( )	( , ,
~	(41.0, 61.0)	(47.6, 61.3)	(43.9, 57.6)	(51.2, 64.7)
	N = 382	N = 204	N = 207	N = 207

Table A20: Demographic means by treatment condition, health care study

This table includes 95% confidence intervals.

% respondents	Control	R1	R2	R3
Black	10.0	12.2	10.6	9.4
	(7.0, 13.1)	(7.9, 16.5)	(6.3, 14.9)	(5.4, 13.4)
Hispanic	10.0	10.4	9.1	12.9
	(7.0, 13.1)	(6.4, 14.4)	(5.1, 13.1)	(8.2, 17.5)
Republican	39.3	36.2	30.8	40.1
	(34.4, 44.2)	(29.8, 42.6)	(24.4, 37.3)	(33.8, 47.4)
Male	48.5	48.9	47.0	48.5
	(43.5, 53.6)	(42.3, 55.5)	(40.0, 53.9)	(41.6, 55.4)
Some college (or more)	60.2	61.1	58.1	60.4
	(55.2, 65.1)	(54.6, 67.5)	(51.2, 65.0)	(53.6, 67.2)
Married	35.9	37.6	33.3	40.6
	(31.0, 40.7)	(31.2, 44.0)	(26.7, 39.9)	(33.8, 47.4)
Employed FT	58.3	51.1	56.1	55.9
	(53.3,63.3)	(44.5, 57.7)	(49.1, 63.0)	(49.1, 62.8)
Age	52.1	49.0	51.3	53.7
	(50.5, 53.7)	(46.8, 51.2)	(49.2, 53.4)	(51.9, 55.6)
Fox News viewers	32.2	31.2	33.3	35.1
	(27.5, 36.9)	(25.1, 37.3)	(26.7, 39.9)	(28.5, 41.8)
High news interest	54.1	49.3	53.5	54.0
	(49.1, 59.1)	(42.7, 55.9)	(46.6,  60.5)	(47.1,  60.9)
	N = 379	N = 221	N = 198	N = 202

Table A21: Demographic means by treatment condition, immigration study

This table includes 95% confidence intervals.

#### **D:** Treatments

The full text of the experimental treatments can be found in Section 1 of this Appendix. Respondents were randomly assigned to one of four conditions, control (no reminder about the Court decision) or one of three reminders: Reminder 1 (ruling only), Reminder 2 (ruling + argument from majority), Reminder 3 (reminder + argument from majority + argument from health care dissent / immigration concurrence). Respondents were asked for their opinion about the provision in their study (either the individual mandate or the "papers" provision of the Arizona immigration law) immediately following the experimental manipulation.

### E: Results

The full question wording of the studies is in Section 1 of this Appendix. The dependent variable in this study is direction of opinion change, based on respondents' stated support for or opposition to the provision in Wave 1 and in Wave 2 (on a 5-point scale). The direction variable could take three values: 0 for respondents who did not change their opinions between the two waves, 1 for respondents who increased their support for individual mandate, and -1 for respondents who reduced their support for the mandate.

In May 2012, a total of 1308 respondents were recruited for the first wave of the health care study, and a total of 1303 respondents were recruited for the first wave of the immigration study. YouGov invited respondents to complete the second wave in late June. The second wave of each study included 1000 respondents. All of the Wave 2 participants provided their opinion in both Wave 1 and Wave 2, so we have no

missing data for our dependent variable. Only Wave 2 respondents were weighted by YouGov, based on "known marginals for the general population of the United States from the 2007 American Community Survey" (according to the YouGov-provided survey documentation), thus attrition from Wave 1 to Wave 2 should not affect representativeness.

Table A22 presents the demographic means for both studies, broken down by the respondents who completed only Wave 1 and the respondents who completed both Wave 1 and Wave 2.

	Health care		Immigration	
% respondents	Wave 1	Both waves	Wave 1	Both waves
Black	13.6	9.2	13.9	10.5
	(9.8, 17.5)	(7.4, 11.1)	(10.0, 17.8)	(8.6, 12.4)
Hispanic	10.1	9.4	8.2	10.5
	(6.7, 13.4)	(7.6, 11.2)	(5.1, 11.4)	(8.6, 12.4)
Republican	20.8	24.9	20.8	27.3
	(16.2, 25.3)	(22.2, 27.6)	(16.2, 25.4)	(24.5, 30.1)
Male	40.9	45.1	48.8	48.3
	(35.4,  46.4)	(42.0, 48.2)	(43.2, 54.5)	(45.2, 51.4)
Some college (or more)	52.9	57.5	61.3	60.0
	(47.3, 58.5)	(54.4,  60.6)	(55.9,  66.9)	(57.0,63.0)
Married	50.6	55.0	49.2	55.8
	(45.1, 56.2)	(51.9, 58.1)	(43.5, 54.8)	(52.7, 58.9)
Employed FT	35.1	36.7	38.3	36.7
	(29.7, 40.4)	(33.7,  39.7)	(32.8, 43.8)	(33.7,  39.7)
Age	46.2	51.2	47.0	51.6
	(44.3, 48.0)	(50.3, 52.2)	(45.2, 48.7)	(50.6, 52.5)
High news interest	43.2	55.0	50.2	52.9
	(37.6,  48.7)	(51.9,  58.1)	(44.5, 55.8)	(49.8,  56.0)
	N = 308	N = 1000	N = 303	N = 1000

Table A22: Demographic means: Respondents completing Wave 1 only vs. Waves 1 & 2

This table includes 95% confidence intervals. The percentages of Fox News viewers are not included in this table, as this data was collected only in Wave 2.

## F: Other information

This experiment was approved by the IRB at the authors' home institution. Funding was provided by the home institution of the authors. The funders were not involved in the research project, nor are there any conflicts of interest with this work.

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