ISSUE-SPECIFIC OPINION CHANGE
THE SUPREME COURT AND HEALTH CARE REFORM

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Abstract Did the Supreme Court decision in the Affordable Care Act case change public opinion about health care reform? Utilizing a multi-wave panel design with observations collected just hours before and after the Court’s decision, this study addresses macro-level questions concerning the Court’s effect on opinion about health care reform generally and the individual mandate specifically. Findings show that support for health care reform remained constant despite significant positive movement on the mandate. The panel design also allows for the analysis of micro-level change and the testing of hypotheses related to cognitive models, individual attributes, and assessments of the Court’s legitimacy. Despite some evidence of micro-level variation, the data ultimately point to a decision that induced a general, persistent, and relatively unconditional uptick in support for the provision the Court deemed constitutional.

One of the biggest and most persistent academic questions about the Supreme Court’s Affordable Care Act (ACA) decision is whether it affected views about the law itself. The case may be the most salient test to date of the various arguments scholars have made about the Court’s ability to change public opinion. The question lies at the intersection of institutional action and mass opinion. Indeed, popular media coverage echoed the academic debate. While some speculated that the ruling would impact public opinion, most expected that deeply ingrained attitudes about the ACA would persist. As Walter (2012)...

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wrote following an ABC/Washington Post poll at the time of oral arguments: “Most Americans have already formed an opinion of the Obama health care law, and a Supreme Court ruling isn’t going to change that.” This sentiment was consistent with months of survey data showing fairly stable public opinion even in the face of continued congressional and presidential activity and debate.

Though there is good reason to expect little change, there is also academic evidence suggesting that the Court may be able to sway opinion. Much of this evidence comes from experiments (e.g., Mondak 1994; Clawson, Kegler, and Waltenburg 2001; Bartels and Mutz 2009). Whether the opinion change found in these experiments will manifest after a real case like the ACA one is less clear. While these experiments have great value, particularly by suggesting important mechanisms underlying opinion change, the artificial environment into which these experiments place subjects can be dramatically different than that facing people after a real landmark decision.

The study presented here offers an externally valid test of whether the Court’s decision affected support for health care reform generally and for the individual mandate specifically. It address micro-level questions concerning the type of cognitive processing people use when confronted with a Court decision and who is most likely to be influenced. Specifically, it examines the effects of a real Court decision on individuals who learn about it in their natural environment, where messaging and information self-selection are inseparable from actual learning and opinion formation. We answer these questions via a multi-wave panel survey that includes data collected just hours before and after the decision. By focusing on within-subject opinion change in a tight window around the decision, we avoid some limitations that have contributed to the mix of findings in the literature. Indeed, this approach allows us to make conceptual and methodological contributions that partly reconcile key disagreements in the scholarly debate and helps clarify thinking about the relationship between the Court and public opinion.

The Supreme Court and Opinion Change

Scholars have asked whether Supreme Court decisions shift public opinion about policies using different measures and methods with varied results. Looking back at decades of studies addressing these questions, recent investigations have noted that the evidence is mixed and that, at most, the Court sometimes shapes opinion (Unger 2008; Bartels and Mutz 2009; Egan and Citrin 2011). Emblematic of the literature, Unger (2008) finds evidence that opinions of respondents who were aware of the Court’s decisions moved toward the Court’s position in one “Ten Commandments” case (McCreary County v. ACLU [2005]) and away from it in another (Van Orden v. Perry [2005]).
There is a noteworthy results gap between experimental and observational studies. Many, but not all, experimental studies in which participants are exposed to information about a (sometimes fictional) Court decision have yielded evidence that the Court can lead to public opinion change on some controversial policy issues (e.g., Mondak 1994; Bartels and Mutz 2009; Clawson, Kegler, and Waltenburg 2001). Observational studies have generally found less evidence of the Court changing hearts and minds (Marshall 1989; Rosenberg 1991), though Campbell and Persily (2013) capture slight movement at the macro level by comparing cross-sectional polls on health care reform. Indeed, some studies have yielded mixed results (Unger 2008). Some have found opinion changing in various directions with limited aggregate effects (Hoekstra and Segal 1996), while others have found changes only in narrower subgroups (Clawson and Waltenburg 2003). As Egan and Citrin (2011, 5) write, citing Marshall (1989), “the most comprehensive study to date with observational data finds that the average change in aggregate opinion after a Supreme Court ruling is essentially zero.”

Perhaps the most important threat to experiments’ external validity is that people rarely learn about actual Supreme Court cases, and what they do hear about cases is accompanied by a variety of partisan and political messages. Almost no one merely hears that the Supreme Court decided a case in a certain way (Unger 2008; Egan and Citrin 2011), as it is often portrayed in experiments. Experiments can estimate the effect of knowing that the Court ruled a certain way on an issue, but are limited in their ability to capture the realities that people often do not receive or understand the Court’s position (Unger 2008) or are influenced by the media’s and other elites’ framing of decisions (Clawson and Waltenburg 2003). In concurrent work that is reassuring for experimental findings, Linos and Twist (2013) compare experimental and natural exposure to the ACA decision.

Addressing these questions forces a trade-off between an internally valid estimate of the outcome effect of knowing the direction of the Court’s ruling and the more externally realistic direct field effect of the Court’s ruling and the messaging that accompanies it. The latter is broader and includes, for example, a ruling’s potential to refocus opinion and reframe debates (Franklin and Kosaki 1989). Moreover, few if any observational studies can differentiate the direct field effect of the actual decision from the indirect field effect of a Court ruling. This indirect effect would include things like the Court making an issue salient irrespective of the actual content of the decision. For example, after Lawrence v. Texas, the public was confronted with an actual decision about sodomy laws and much broader attention on gay rights issues. It is unclear how much we should attribute opinion changes to the direction of the Court’s ruling, and how much we should attribute to it simply priming gay rights issues (Egan, Persily, and Wallsten 2008).
Finally, studies in the literature can rely on very different counterfactuals to the Court’s ruling. The counterfactual in experiments is often some other institution making a decision (e.g., Mondak 1994), whereas in observational studies it is often the absence of any new signal. Additionally, some focus on acceptance of decisions (reduction of resistance) while others measure agreement (increased policy support) (Mondak 1994). All of these factors likely contribute to the mixed findings in the literature and point to the need for explicitly detailed research designs, particularly in terms of measuring treatment effects and offering externally valid counterfactuals.

Theoretical Expectations

Our most central and basic theoretical claim is that public opinion will move toward the Court’s opinion, and that it will do so because some people allow the Court to resolve their constitutional uncertainty. We argue that people process information systematically, such that a new signal from the Court affects their views about the pertinent issues and constitutional questions.

To be clear, we are not arguing that policy views are driven by highly sophisticated constitutional views. Rather, people can have sincere questions about a law’s legitimacy, which the Court can either assuage or exacerbate and thereby affect policy attitudes. This theoretical orientation leads to predictions of attitude movement toward supporting the ACA, given the direction of the Court’s ruling. Moreover, this movement should manifest on questions related to the individual mandate, especially among those who would most benefit from the law but who may have had constitutional concerns.

Our first hypothesis concerns the shape of opinion change. One of the key distinctions in the literature is between aggregate opinion change and the “structure” of opinion (Franklin and Kosaki 1989). In the former, the question is whether opinions change on average. In the latter, the question is whether individuals’ or groups’ opinions change even if overall opinion is stable, and/or some change more than others. We hypothesize aggregate change by predicting movement in the direction of the Court’s decision. Given other findings in the literature, one could derive well-grounded alternative hypotheses, including 1) no change; 2) backlash, in which opinion moves against the Court; or 3) polarization, in which different groups move in different directions undermining aggregate change.

Hypothesis 1: Aggregate Agreement—Public opinion about a policy issue moves in the direction of the Court’s ruling.

In addition to macro changes in opinion, we also consider the micro processes embedded in them. As in work on political opinion formation more generally, one important distinction concerns mindful consideration of information versus a reliance on heuristics and cues (Bartels and Mutz 2009). The
main reason to expect higher-level cognitive processing following a Court
decision is that, relative to other elements of the political system, the Court’s
opinions provide fodder for it by transparently elaborating arguments to jus-
tify positions.

More broadly, questions about the Court’s impact on opinion, especially
when it rules on one aspect of a bigger issue, tie loosely to the broader behav-
ioral literature on domain-specific approaches to public opinion. Here, broad
principles and values specific to particular issue areas are thought to guide
policy preferences (Hurwitz and Peffley 1987; Feldman 1988). These prin-
ciples are broad enough that they require little political sophistication to acquire
and utilize (Feldman 1988; Goren 2004), but not so broad as to translate to
different issue areas. Most important for our study is the basic idea that people
can and do differentiate narrower issues from the broader ones they are con-
Nected to (see, e.g., McGraw and Pinney 1990).

The ACA case offers unusual potential for assessing systematic processing,
because the Court ruled on the narrower issue of the individual mandate and
this ruling had much broader implications for the ACA reforms in general.
The higher-level processing prediction implies that people will distinguish the
mandate from health care reform in general, and that attitude updating will
be confined to the mandate. In this case, heuristic influence stands as a strong
alternative hypothesis.1 Under heuristic influence, we would expect a more
general positive “halo” effect, which increases support for health care reform
broadly after the Court provides a positive signal about the ACA. The ration-
ale behind this alternative hypothesis is that Court decisions are too com-
plex to support systematic processing, and/or the information they provide
for systematic reasoning may be swamped by political messaging. Moreover,
because the Court is generally held in high esteem (e.g., Gibson 2007), its
positions may be especially strong elite heuristic cues.

Hypothesis 2: Issue-Specific Change—Public opinion will move more
on the narrow issue on which the Court ruled than on
the broader related issues.

The next hypothesis concerns variation stemming from differences in under-
lying support for the policy’s goals. Given the sincere constitutional concerns
above, there likely is a subset of people who support a policy’s goals but have
some reservations over constitutional issues. For example, those who have
some concerns about racial preferences but who like affirmative action’s goals
may be willing followers in that they will relax their sincere constitutional con-
cerns if the Court tells them it is okay to do so. If the Court is having an impact
by helping resolve people’s constitutional uncertainty, we should see large
effects among those who would be inclined toward the direction of the Court’s

1. Bartels and Mutz (2009) argue that the Court is influential through both pathways.
decision without their own constitutional skepticism. This stands in contrast to the expectation that the most change should occur among skeptics of the law, who reduce their resistance after the Court contradicts their position.

Hypothesis 3: Willing Followers—People who like a policy’s goals will be more likely to increase support if the Court declares it constitutional.

In addition to these predictions related to our focus on opinion change and systematic processing, our data also provide important opportunities to investigate two other individual-level hypotheses derived from substantial bodies of existing work. One concerns the strength of preexisting considerations. In many instances, those who are the most informed will be the most likely to receive a signal of the Court’s decision, which would make them the most susceptible to change. On the other hand, conditional on awareness, those with the most political interest and information may be less subject to new considerations and change (Zaller 1992). Indeed, the dominant theory posits that information has a conditioning effect (Luskin 2002), and enables stronger links between political ideology and issue support (Zaller 1992; Sniderman, Brody, and Tetlock 1993; Delli Carpini and Keeter 1996). In a high-salience case like the ACA, in which basic awareness is pervasive, we expect those with stronger prior considerations to have more stable opinions.

Hypothesis 4: Strong Priors—Those with strong prior issue considerations will be less likely to change their views in response to a Court decision.

Finally, perhaps the most-cited reason to expect opinion leadership from the Supreme Court is that the public generally views the Court as a highly legitimate institution (Mondak 1994; Gibson, Caldeira, and Baird 1998; Gibson 2007). Because individuals’ legitimacy assessments (diffuse support) of the Court vary (e.g., Gibson and Caldeira 2009c, 2011; Christenson and Glick 2015), the literature suggests that they constitute a potential source of variation in the Court’s impact on views such that those with the most reverence for the Court are the most likely to change their policy positions after it speaks (e.g., Hoekstra 1995; Clawson and Waltenburg 2003). Experimental findings comparing the Court to other, less estimable institutions, such as Congress (Hoekstra 1995; Bartels and Mutz 2009) and local political figures (Mondak 1994), demonstrate the link between the Court’s reputation and its potential to sway public opinion.

2. More directly related to the Court and opinion change, see, for example, Hoekstra and Segal (1996); Clawson and Waltenburg (2003).
Hypothesis 5: High Legitimacy—High prior diffuse support for the Court leads to increased opinion movement toward the Court’s position.

Data and Design

In the spring and summer of 2012, we conducted panel surveys in five waves around the health care decision. These surveys comprised a wide variety of questions about the Supreme Court, the ACA, and politics in general, and, most importantly, gathered opinions about both the individual mandate and general health care reform. These data allow us to differentiate the Court’s effect on the actual issue it ruled on from the broader policies to which it is tied. The true panel form asked these same questions to the same people in different waves, and differs from studies that retroactively create pre-post measures by aggregating cross-sectional surveys, leaving micro-level change unexplored. Such panel data are “woefully scarce” (Gibson and Caldeira 2009a, 5) in studies of the Court and public opinion, and, as we show below, provide unusual leverage on the real-world effects of the ACA decision on public opinion.3

As illustrated in figure 1, the panel is constructed of multiple waves in tight time windows before and after the decision. Specifically, we collected data a week before the decisions (wave 1), the Monday many observers of the Court expected a decision (wave 2), on the day immediately after the decision (wave 3), and another two weeks after that (wave 4). We returned to the field and conducted a final wave (wave 5) in November at the time of the election.

US voting-age respondents were recruited to the panel using Amazon.com’s Mechanical Turk (MTurk) crowdsourcing marketplace, an online platform that allows individuals and organizations to pay subjects to perform various tasks. The cloud-based environment enables us to cull our original sample from registered MTurk workers to take an online survey and easily re-contact them to participate in subsequent waves fielded tightly around unfolding political events (see also Christenson and Glick [2013]). While MTurk does not produce a nationally representative sample, Berinsky, Huber, and Lenz (2012) show that it has favorable features relative to the student and local samples commonly used in the experimental literature. Our sample demographics are consistent with theirs, and, similarly, younger and more liberal than the best probability samples yet more representative than typical convenience samples. Furthermore, our data suggest few if any concerns about panel attrition. Retention was high, and attrition was ostensibly random with respect to demographics. The article’s appendix contains details about the data collection and details, and the online appendix contains more elaborate discussions about our use of an MTurk sample.

3. For related panel studies in this context, see Christenson and Glick (2015) and Linos and Twist (2013).
The trade-off in our choice of research design is one of representativeness in a national probability sample for a convenience sample that provides leverage in the field. Specifically, MTurk not only makes the multi-wave panel design fiscally viable, but also offers substantial control over the survey timing and the flexibility to field surveys around the unpredictable opinion release schedule. It is no surprise, then, that while Berinsky, Huber, and Lenz (2012) focus on experiments, they also suggest that this sample might be useful to panel studies (see, e.g., their footnote 9). Indeed, the ability to time our data collection right around the Court’s decision is critical for estimating a precise treatment effect, and is unprecedented in the literature.

The multiple and tightly situated waves before and after the decision allow us to parse the true effect of the decision from random variation in health care public opinion. This panel design allows us to at least partly differentiate the direct field effect of the Court’s ruling and reaction to it from the indirect field effect that may come from increased attention to the issues independent of the content of the decision. Because our second pre-decision wave captures data just days (and hours) before the decision and includes the time when the media were focused on the anticipated decision, the effects we observed immediately after the decision are attributable mostly to the decision’s content and not just its existence priming the issues. Finally, our panel, with multiple waves after the decision, enables us to check for longer-lasting effects.

The combination of the case and our design also help avoid other barriers to detecting effects encountered in previous studies, including samples with low awareness or poorly established policy positions as well as a lack of survey questions that closely tap the actual policy areas related to the Court’s decision. We benefit from substantive contrasts related to the salience and political rhetoric around the health care case. While others have explicitly asked questions about the Court’s impact in “regular” cases using local public opinion to capture an alert population (Hoekstra and Segal 1996), our focus is the Court’s impact on public opinion in the exceptional instances in which the country is naturally paying attention and for which many people already have opinions on the issues.

4. See Gaines et al. (2007) on using a student convenience panel in an analogous situation.
Analysis

To begin, we compare average support for health care reform generally with average support for the individual mandate in the periods surrounding the decision in figure 2. The left-hand column plots the mean responses to a summative index of three questions about health care reform support in general: “Do you favor or oppose changing the health care system in this country so that all Americans have health insurance that covers all medically necessary care?” “Do you think increased involvement by the federal government in the country’s health care system will improve the current system, make it worse, or have no effect?” “From what you know of those health care reforms, do you think you and your family would, in general, be better off, worse off, or about the same as a result of those reforms?” These three measures (one four-point and two three-point ordinal scales) have high internal consistency (Cronbach’s $\alpha = .82$) and yield a combined eight-point unidimensional scale (factor loadings of .72, .79, and .75, respectively) ranging from three (minimum support) to ten (maximum support). In contrast, the right side of the figure plots the mean response to a question about how favorably (four-point scale) people view the part of the law that would “require nearly all Americans to have health insurance by 2014 or else pay a fine.”

Because this case was relatively salient and politically charged, we expected views about health care reform to vary by differences in political ideology, partisanship, political information, and trust in government. Thus, figure 2 breaks apart mean support for both the general and mandate-specific variables by these subgroups. Not surprisingly, Democrats and liberals were much more supportive than Republicans and conservatives, respectively. Also as expected, those who have higher trust in government are generally more supportive of health care reform. Income is the only attribute that appears to have opposite effects on general and mandate-specific support. While higher-income individuals are less supportive of health care generally, they are more supportive of the mandate than those with less income. This may capture the reality that lower-income people may benefit the most from reform but may also be most directly affected by the mandate.

Most apparent from these plots is the contrast in the evolution of general and mandate-specific support. Across all of the groups, general health care support (the left-side graphs of figure 2) appears stable across the waves. At a minimum, it provides no evidence of an effect throughout the month (waves 1–4). It is particularly flat between waves 2 and 3, when the decision was announced.

On the other hand, the figures on the right illustrate an ostensible effect of the ruling upholding the mandate on opinions about the mandate. Across all the subgroups, though in varying amounts, we see a sigmoidal shape with the steepest slope at the time of the decision (between waves 2 and 3). Support appears to have increased after the ruling, and to have persisted irrespective of
Figure 2. Mean Health Care Support by Group. Decision refers to the period between the second and third waves when the Supreme Court ACA decision was announced. The first four waves were collected in a four-week period, while wave 5 was collected months later.
party, ideology, information, or trust. Moreover, mandate support was stable between waves 1 and 2 despite increasingly high salience and expectations of a ruling. This supports the claim that the change between waves 2 and 3 is the effect of the actual decision upholding the mandate. This pattern suggests support for the aggregate agreement hypothesis (H1) and a lack of support for the backlash or polarization alternative hypotheses. The favorable ruling appears to have increased support for the mandate, although only in moderate amounts, and this increase appears to be more than an ephemeral bounce.

Together, these plots suggest that people distinguished the constitutionality of the mandate from their views about health care in general. Support for the former appears to move considerably more than support for the latter. This is at least tentative evidence for the higher-level cognition inherent in the systematic processing hypothesis (H2), rather than the heuristic influence or halo effect alternative hypothesis. Of course, these graphs are merely descriptive. They do not include standard errors, and even though they break out participants in a non-representative sample by relevant group traits (see also Gaines et al. [2007]), they are not inferential statistics. In order to truly test these ostensible relationships, we proceed to multivariate models that allow us to more fully take advantage of our panel data and control for relevant sources of variation.

Support for Health Care Reform & the ACA Decision

Table 1 reports the results from models of both general and mandate-specific health care support as functions of relevant covariates. As above, general health care reform support is an eight-point summative index. Support for the mandate is measured on a four-point scale and collapsed here to a dichotomous choice of support or opposition by splitting the scale in half.5

We have longitudinal data on the support for health care reform and the mandate from the same person at five points in time. Such data violate the independence assumptions of typical static models, since multiple responses from the same individual are unlikely to be independent from each other. Mixed-effect models are commonly used to deal with clustered data of this nature (see, e.g., Raudenbush and Bryk 2002; Galwey 2006; Goldstein 2011). The coefficients, with standard errors in parentheses, are from linear mixed and generalized (logit) linear mixed models, respectively, with random group intercepts for individuals to account for the error correlation in panel responses. These models assume a different baseline level of support for each

5. Because models of the ordinal construction exhibit the potential for bias given a violation of the proportional-odds assumption, we use a dichotomous variable construction and logistic specification here and show in the online appendix that the substantive conclusions from a similarly specified ordinal model are virtually identical.
individual, which allows us to capture idiosyncratic variation due to individual differences.

The models include the aforementioned variables along with media attention, other basic demographics, and an indicator for each survey wave. Of most relevance to our hypotheses, the wave indicators allow us to test for differences with respect to the baseline category, wave 1, that are otherwise unaccounted for in the model. A significant wave effect would suggest a systematic change in support with respect to wave 1 that is not attributable to the covariates. If the ACA decision was such an event, we should expect to see a significant coefficient immediately after wave 2—that is, in wave 3—confirming the intuition of the steep areas in the plots above (see figure 2).

6. To ease interpretation and make the effect sizes apparent from the generalized model, we present the predicted probabilities for all the covariates in figure A2 in the online appendix, and focus our discussion here on the results pertaining to the hypotheses.

<table>
<thead>
<tr>
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<th>General Mandate</th>
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<tbody>
<tr>
<td></td>
<td>Linear mixed-effects</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Ideology</td>
<td>–0.419* (0.036)</td>
</tr>
<tr>
<td>Democrat</td>
<td>0.944* (0.140)</td>
</tr>
<tr>
<td>Republican</td>
<td>−0.877* (0.161)</td>
</tr>
<tr>
<td>Trust in governmen</td>
<td>0.350* (0.063)</td>
</tr>
<tr>
<td>Media attention</td>
<td>0.026 (0.059)</td>
</tr>
<tr>
<td>Age</td>
<td>0.003 (0.004)</td>
</tr>
<tr>
<td>Education</td>
<td>0.079 (0.063)</td>
</tr>
<tr>
<td>Female</td>
<td>−0.057 (0.090)</td>
</tr>
<tr>
<td>Black</td>
<td>0.247 (0.169)</td>
</tr>
<tr>
<td>Latino</td>
<td>0.034 (0.206)</td>
</tr>
<tr>
<td>Income</td>
<td>−0.162* (0.044)</td>
</tr>
<tr>
<td>Wave 2</td>
<td>−0.004 (0.041)</td>
</tr>
<tr>
<td>Wave 3</td>
<td>−0.072 (0.043)</td>
</tr>
<tr>
<td>Wave 4</td>
<td>−0.062 (0.045)</td>
</tr>
<tr>
<td>Wave 5</td>
<td>0.086 (0.053)</td>
</tr>
<tr>
<td>Intercept</td>
<td>7.444* (0.353)</td>
</tr>
</tbody>
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Random effect variance: 2.089, 8.192
Observations: 1,241, 1,241
Log likelihood: −6,986.607, −1,953.605
Akaike inf. crit.: 14,009.210, 3,941.210
Bayesian inf. crit.: 14,123.640, 4,049.279

Coefficients from linear and generalized mixed-effects models with standard errors in parentheses.
*p < 0.05
Before we turn to our variables of primary concern, we consider some of the covariates in the models. In many ways, the two models in table 1 are very similar and largely corroborate the insights from the simple support dynamics graphs above. For the most part, the same factors predict support for health care reform and for the mandate provision, and do so in the same direction. Conservatives were less likely than moderates or liberals to support both. Likewise, Democrats were more supportive of reform than Republicans and independents. We also find that the health care reform and the mandate support variables follow variations in governmental trust.

Substantial differences exist across the models as well. Media attention, education, and gender all surpass conventional bounds of statistical significance in the mandate model only. Greater media attention and education act to increase support for the mandate. For example, going from less than a high school diploma to a college degree, or going from not paying attention to the news to following it daily, each increase the average probability of support by about a third. Being a woman, however, was more likely to decrease support for the mandate by about .11. Finally, we see the same sign switch on the income variable that we noted in figure 2 earlier. While not one of our predictions is significant at conventional levels in the mandate model, these results are hardly illogical. The wealthiest may feel the least need for health care reform; however, fines associated with failure to pay for insurance are most likely to be felt by those of more modest means.

Our primary interest in these models concerns the dummy variables that capture the wave effects. Importantly, this is where the models differ the most. Consistent with the plots we showed earlier, we cannot reject the null hypothesis that general health care support does not vary across waves. In fact, the magnitude of the coefficients is tiny, the signs are in the wrong direction, and the standard errors are very large. At a minimum, we find little evidence of an effect on general health care reform support. In contrast, the mandate model has significant positive wave effects starting in wave 3 and persisting for months after. Since the decision occurred between waves 2 and 3, this finding suggests that the decision led to a positive boost in mandate-specific support otherwise unexplained by the covariates in the model.

Figure 3 illustrates the magnitude of the effect by plotting the average marginal predicted probability of mandate support for each wave relative to the wave 1 baseline. Here, we calculate the conditional probabilities for every individual in order to account for the random terms and average across them. In the online appendix, we follow Rainey (2014) by suggesting a substantive cutoff for negligible effects, akin to a two one-sided test (TOST) of equivalence (Berger and Hsu 1996), to further demonstrate that our null results are negligible. We provide effect magnitudes for all the covariates in the online appendix.
wave 1 baseline (denoted 0 in each plot), holding the other covariates at their mean (continuous) and mode (dichotomous) with shading for the confidence intervals. In the case of wave 2, we see little average change in support across the respondents relative to wave 1. On the contrary, support in wave 3 is both significantly and substantively larger than both pre-decision waves.

Among the benefits of our panel design is the leverage offered by the additional post-decision waves. Because wave 4 data were collected about a month after the decision, and wave 5 data three months beyond that, we can test whether the effect of the decision on mandate-specific health care support persists. For each of the post-decision wave dummies, we find a significant difference from the pre-decision baseline. waves 3, 4, and 5 all have an effect on health care reform support that is more positive and significantly different from that of wave 1. The decision significantly bumped up support for the mandate, which did not revert to its pre-decision level—increasing the average probability of support by between .14 and .15 for each of the post-decision waves. Together, these models confirm, with control for potential confounding variables, the story the simple plots above told visually. The Court had a positive effect on support for the mandate, and people, at the very least, differentiated the actual substance of the case from the broader health reform issue. We find no evidence that the mandate decision spilled over to general attitudes about reform.

**Change in Support for the Individual Mandate**

Having provided evidence of the ACA decision affecting mandate-specific support, we now analyze the individual-level predictors of that change. Here,
we expand our list of covariates to include those that allow us to test the individual change hypotheses introduced above. We include an egocentric measure of health care reform support to capture early predispositions to reform to test the willing followers hypothesis (H3). Specifically, we use a measure that captures people who think the ACA will help their families. We expect it to have a positive effect as these respondents relax their concerns about the mandate once the Court declares it constitutional. Similarly, we use an index of diffuse support for the Court (see Gibson, Caldeira, and Spence 2003; Bartels and Johnston 2013) to test the hypotheses that those who view the Court as highly legitimate are more likely to be persuaded by it (H5). Finally, we use a summative index of factual information questions, specifically pertaining to the details of the case decision, to further explore the role of knowledge in opinion change. Since in this case salience was high, those who were most knowledgeable were likely very interested in the issues from the beginning and therefore less open to changing their minds in light of new information (see Zaller 1992) (H4).

Table 2 presents the results of two models. In both cases, the dependent variable is the change in mandate-specific health care support around the ACA decision (i.e., from wave 2 to wave 3). We provide estimates for both a directional dependent variable, on a seven-point scale with high scores referring to greater support after the decision, and a dichotomous dependent variable, on a two-point scale for change versus no change. The directional model allows us to test whether these variables move individuals toward more or less support for the mandate. In contrast, the dichotomous model allows us to test the effects of the covariates on any change to highlight sources of stability. The former regression employs ordinary least squares, and the latter logit for the dichotomous choice between supporting or not supporting the mandate.10

The overall story these two models tell is one of little systematic change. That is, for the most part, the significant effect of the decision on mandate support is not driven by particular traits, but rather, an across-the-board increase.11 We see a moderate partisan effect as Democrats (low on the seven-point partisan strength measure) responded more positively to the decision, but we do not see polarization. Though they did not jump up at the same rate as Democrats, Republicans, on average, also increased their support for the mandate after the decision.

The expected stability effect (H4) among knowledgeable respondents emerged as well. The more someone knew about the cases, the more stable their opinion around the decision. This is captured in the significant and negative

9. We show in the online appendix that the results are virtually unchanged when employing ordered probit or ordered logit models for this specification.
10. To make the magnitude of the covariate effects from the logit model more intuitive, we also illustrate the predicted probabilities of change in support in figure A3 in the online appendix.
11. Our major findings are consistent using a lagged dependent variable instead of the differenced dependent variable model.
coefficient in the logit model. Going from uninformed to highly informed about the case translates to a decrease in probability of change (either direction) in support for the mandate of .20. While in many cases the most knowledgeable may be the only ones open to persuasion, because they are the only ones that are exposed to news about the decision, in a high-salience case those with the strongest considerations are also the most stable (Zaller 1992).

H3, regarding willing followers, is tested with the egocentric reform variable and supported by the data. Those who thought the ACA would benefit them were more willing to change their views about the mandate. Presumably since these people believed the law would help them, the constraint on their support for the mandate was rooted in sincere constitutional concern. As predicted, the Court was most able to assuage their doubts because they most wanted to believe the mandate was constitutional (see the positive and significant directional coefficient on the egocentric reform support variable). Confirming the willing followers hypothesis also provides additional, though indirect, evidence for the systematic processing model hypothesis (H2). The willing followers finding is consistent with people differentiating their views

### Table 2. Models of Change in Support for the Mandate

<table>
<thead>
<tr>
<th></th>
<th>Directional Δ</th>
<th>Dichotomous Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLS (1)</td>
<td>logistic (2)</td>
</tr>
<tr>
<td>Ideology</td>
<td>-0.02 (0.017)</td>
<td>-0.032 (0.047)</td>
</tr>
<tr>
<td>Strength of partisanship</td>
<td>-0.032 (0.017)</td>
<td>-0.096* (0.047)</td>
</tr>
<tr>
<td>Egocentric reform support</td>
<td>0.083* (0.041)</td>
<td>0.359* (0.112)</td>
</tr>
<tr>
<td>Court legitimacy</td>
<td>0.004 (0.007)</td>
<td>0.009 (0.019)</td>
</tr>
<tr>
<td>Decision knowledge</td>
<td>-0.007 (0.022)</td>
<td>-0.151* (0.059)</td>
</tr>
<tr>
<td>Trust in government</td>
<td>0.020 (0.040)</td>
<td>0.162 (0.109)</td>
</tr>
<tr>
<td>Media attention</td>
<td>0.039 (0.036)</td>
<td>0.053 (0.096)</td>
</tr>
<tr>
<td>Age</td>
<td>0.003 (0.002)</td>
<td>0.001 (0.007)</td>
</tr>
<tr>
<td>Education</td>
<td>0.006 (0.041)</td>
<td>0.013 (0.110)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.002 (0.055)</td>
<td>-0.422* (0.150)</td>
</tr>
<tr>
<td>Black</td>
<td>-0.025 (0.113)</td>
<td>0.466 (0.297)</td>
</tr>
<tr>
<td>Latino</td>
<td>0.255* (0.128)</td>
<td>0.114 (0.340)</td>
</tr>
<tr>
<td>Income</td>
<td>-0.074* (0.027)</td>
<td>0.189* (0.073)</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.100 (0.255)</td>
<td>-1.314 (0.695)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Observations</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Log likelihood</th>
<th>Akaike inf. crit.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>856</td>
<td>0.038</td>
<td>0.023</td>
<td>−548,700</td>
<td>1,125,400</td>
</tr>
</tbody>
</table>

Coefficients from ordinary least squares and logit models with standard errors in parentheses. *p < 0.05

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Christenson and Glick
about health care from their sincere concerns about the propriety of the mandate and then changing their minds based on the new mandate-specific information from the decision.

Finally, and contrary to some findings in the literature, we find little evidence that predispositions about the Court’s legitimacy (prior to the decision) had an effect on persuasion (H5). As the model shows, we are unable to reject the null that prior legitimacy assessments are unrelated to changing views about the individual mandate. This is noteworthy given the role that prior legitimacy assessments often play in response to new information from the Court (e.g., Gibson and Caldeira, 2009b, 2009c; Christenson and Glick 2015). Combined with the other findings, it suggests that the Court’s ability to change issue opinions with its decision is not a direct product of the general esteem people have for the Court, at least on this case.

**Discussion and Conclusion**

The combination of the health care decision and our new panel study offers unusual insight into the question of whether the Court influences public opinion with its decisions and into the mechanisms behind elite institutions’ abilities to shape mass opinion. Our answer to the big question about the Court’s ability to influence the public is that it can and did. Even in one of the most politically polarized cases ever, public opinion moved toward the Court’s position once it was revealed. While much of this movement came from reinvigorated Democrats, if anything, Republicans also moved toward supporting the mandate. We found no evidence of polarization or backlash. The data evince a combination of relative stability and a positive uptick in support that then persisted past the period immediately following the decision.

The decision is better thought of as a public opinion victory for the individual mandate than as one for the Affordable Care Act broadly, since we find no evidence for the latter. This finding is not a mere point of interest. It provides at least suggestive evidence relevant to general behavioral questions about cognitive processing and the mechanisms through which elites can influence mass opinion. Specifically, our results cautiously suggest fairly sophisticated cognitive processing in the formation of public opinion. The fact that we find strong evidence of mandate support changes without evidence of accompanying ACA support changes tentatively implies that people differentiated the aspect of the health care law that was before the Court from health reform more generally. In other words, they were able to process the signal from the Court at a level beyond “good news” or “victory” for President Obama and the Affordable Care Act.

Two other results augment this interpretation of our main results. First, the fact that our willing followers increased support is also consistent with them
holding sincere concerns about the mandate that were alleviated by the Court’s decision. Second, the fact that we did not find a significant effect of prior legitimacy assessments is also consistent with relatively nuanced cognitive processing. It is not that people assessed the Court’s opinion like constitutional scholars, but that they processed the actual signals the Court provided at a high level relative to the very low expectations that behavioral research often implies.

Two potential limitations of our data warrant additional discussion. The first is the case from which they come. It is natural to wonder what broader conclusions we should draw from the health care decision, given its abnormal salience and the political polarization surrounding it. While the case is far from typical, it is also in some ways the ultimate test for claims about the Court’s effect on public opinion. While clean experiments in low-salience (perhaps fictional) cases enable insight into the effect of knowing the Court’s decision, we are ultimately concerned with the Court’s impact on opinion in cases that people care about and those that they are likely to actually hear about. Moreover, because of the high salience and polarization inherent in anything having to do with health care reform, this case is in many ways a hard one for claims that the Court can change opinion. The second potential limitation is the sample itself. However, we believe the price of an imperfect sample is a worthy exchange for the unprecedented research design features that MTurk enabled. Nevertheless, we do think readers should interpret and extrapolate from our results cautiously.

Irrespective of the specifics of this case, our research has significant implications for future investigations into these questions. For one, we believe it highlights the importance of considering which effect (e.g., the outcome, or direct or indirect field effects) is substantively important, and which can be identified by the research design. In addition, our results point to the importance of question wording and conceptualization. Asking about only general health care reform support or only mandate support were both very plausible scenarios in our study, but frequently academic and commercial polls do not distinguish broad versus narrow attitudes. Either would have produced incomplete results and potentially incorrect inferences. These distinctions have important methodological implications for the study of the Court and public opinion. For better or worse, the courts break up complex issues into smaller pieces. Our research suggests that the public is able to follow these distinctions, and that research designs and substantive claims should be sensitive to these realities.

Appendix

This appendix contains information about the survey and data collection. Additional information, including a more elaborate discussion of data
collection and Mechanical Turk, along with supplementary analyses and results noted in the manuscript, are available in the online appendix.

**Question Wording**

*Dependent Variables*

General Health Care Support—A summative index of the following three questions. Properties of this index are described in the text and online appendix.

Do you favor or oppose changing the health care system in this country so that all Americans have health insurance that covers all medically necessary care?

( ) Strongly oppose ( ) Oppose ( ) Favor ( ) Strongly favor

Do you think increased involvement by the federal government in the country’s health care system will improve the current system, make it worse, or have no effect?

( ) Improve it ( ) Make it worse ( ) No effect

From what you know of those health care reforms, do you think you and your family would, in general, be better off, worse off, or about the same as a result of those reforms?

( ) Better off ( ) About the same ( ) Worse off

*Support for the Individual Mandate*

Please tell us whether you feel very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable about each of the following possible changes to the health care system.

Require nearly all Americans to have health insurance by 2014 or else pay a fine:

*Independent Variables*

*Branching Ideology and Partisanship Questions*

We hear a lot of talk these days about liberals and conservatives. On most political issues, do you think of yourself as liberal, moderate, or conservative?

If “moderate” branch: Would you say that you are more on the liberal side or the conservative side?

If “liberal” branch: Is that extremely liberal or somewhat liberal?

If “conservative” branch: Is that extremely conservative or somewhat conservative?
Partisanship
Now, turning to another topic, generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?

If “Independent” branch: Do you think of yourself as closer to the Republican Party or to the Democratic Party?

If “Republican” branch: Do you think of yourself as a strong Republican or a not very strong Republican?

If “Democrat” branch: Do you think of yourself as a strong Democrat or a not very strong Democrat?

Trust in Government
Generally speaking, how much do you trust the federal government as a whole to operate in the best interests of the American people—a great deal, a fair amount, not too much, or not at all?

Media Consumption
Variable constructed from the sum of responses to the following four questions. All on a scale from zero to seven days a week.

How many days in the past week, if any, did you read a daily newspaper?

How many days in the past week, if any, did you watch national network news on TV—by which we mean ABC, CBS, NBC, or PBS?

How many days in the past week, if any, did you watch cable news, such as CNN, Fox News Channel, or MSNBC?

How many days in the past week, if any, did you listen to radio shows that invite listeners to call in to discuss current events, public issues, or politics?

Knowledge about the Affordable Care Act Supreme Court Decision
Variable is the number of questions answered correctly.

Did the Supreme Court’s majority rule that the provision of the healthcare law which requires nearly all Americans to have health insurance by 2014 or else pay a fine is constitutional, unconstitutional—or did it not decide on this issue?

( ) Constitutional
( ) Unconstitutional
( ) It did not rule on this issue.

According to its written decision, the Court’s majority ruled that this provision was constitutional because:

( ) Congress has broad powers to regulate the national economy, which include mandating purchases when Congress feels it is necessary to do so.
While Congress cannot normally mandate purchases, health insurance is an exception since everyone will use it someday.

All Americans, regardless of wealth, have a constitutional right to health care.

The law’s penalty for not having health insurance is similar to a tax, and Congress has the power to create new taxes.

The mandate is a necessary part of regulating the complicated health care system because without it people could just wait until they were sick to buy insurance.

According to its written decision, the Court’s majority ruled that this provision was unconstitutional because:

- Health insurance is traditionally an issue for the states to regulate, and the federal government has no power in this area.
- If Congress has the constitutional power to make people buy health insurance, it also must have the power to make them buy other things (like broccoli), which would violate basic liberties.
- The health care law would make government too big and too expensive.
- Americans have a fundamental right to spend their money however they want to spend it.
- There is no evidence that the mandate is necessary to improving the health care system.

According to its written decision, the Court’s majority did not rule on this issue because:

- It will rule on it later (postponement).
- It would compromise the President’s power.
- The health care law would make government too big and too expensive.
- Americans have a fundamental right to spend their money however they want to spend it.
- The law’s penalty for not having health insurance is similar to a tax, and only Congress has the power to create new taxes.

Four justices filed a dissenting opinion together. What was their basic position?

- The individual mandate should be struck down, but provisions such as the one preventing insurance companies from denying people coverage because of preexisting conditions should stand.
- The entire Affordable Care Act should be struck down.
- The individual mandate cannot be considered a “tax” because President Obama publicly said it was not a tax.
- Health care is not a national issue, and regulation of it must be left to the states.

Court Legitimacy Index

Summation of responses to the following five questions. Answer categories for all: strongly disagree, disagree, agree, strongly agree.
If the Supreme Court started making a lot of rulings that most Americans disagreed with, it might be better to do away with the Court altogether.

The Supreme Court gets too mixed up in politics.

The decisions of the Supreme Court favor some groups more than others.

The Supreme Court can usually be trusted to make decisions that are right for the country as a whole.

Generally speaking, I trust the Supreme Court to operate in the best interests of the American people.

Demographics

What racial or ethnic group do you consider yourself a member of?


In what year were you born?_____

What is the highest level of education you have completed?

( ) 8th grade or less, ( ) Some high school, ( ) High school graduate, ( ) Some college, ( ) College graduate

Are you male or female?

( ) Male, ( ) Female

Please estimate the total combined annual income before taxes for you and the other members of your household.

( ) Less than $29,999, ( ) $30,000 to $49,999, ( ) $50,000 to $99,999, ( ) $100,000 to $299,999, ( ) More than $300,000

Further Information on Data and Procedures

This information supplements that provided in the Data section of the manuscript and in the online appendix. The population under study is the residents of the United States over the age of 18. The study was an opt-in panel survey. We collected our sample from Amazon.com’s Mechanical Turk (MTurk) service and implemented our surveys online using SurveyGizmo. We recruited the initial participant pool by posting an open ad or "HIT" on MTurk offering $1 for a “15 minute survey about politics and health care.” We followed the best practices established in Berinsky, Huber, and Lenz (2012) and restricted the posting to MTurk users who are US residents, are 18 years of age or older,
and had at least a 95 percent approval rating on their previous MTurk tasks. We excluded participants with IP addresses outside the United States. For subsequent waves, we sent e-mail invites to all who had successfully completed the previous wave, which contained links to a private MTurk HIT. The dates of the data collection (each wave) are indicated in figure 1. The number of responses per wave was 1,242, 944, 856, 751, and 469, and panel attrition appears largely random, with nearly equal drop-off across categories of respondent traits, including race, gender, partisanship, and income (see figure A1 in the online appendix). Note that both the text and the online appendix provide further details on the data and on our necessary use of a convenience sample to conduct a panel study around a moving target event. All analyses use all respondents.

Supplementary Data

Supplementary data are freely available online at http://poq.oxfordjournals.org/.

References


