Backlash, Consensus, Legitimacy, or Polarization:
The Effect of Same-Sex Marriage Policy on Mass
Attitudes

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Abstract

What are the effects of judicial action and policy implementation on attitude change? The previous literature indicates that attitudes may change, but there is some debate about its direction. According to some theories, legislation or litigation should strike a backlash, resulting in greater disapproval of the issue. Other perspectives contend that these acts reflect consensus, legitimate, or polarize the issue. We analyze panel data on attitudes toward same-sex marriage and feelings toward lesbians and gay men. In 2013, the U.S. Supreme Court made historic decisions on same-sex marriage, and residents in some states had same-sex marriage legalized. Given this variation, we decompose the multiple pathways attitudes change among residents in different policy contexts over time. We find that residents of states that had same-sex marriage policy introduced had the greatest reduction of anti-gay attitudes. We consider consensus and legitimacy as most applicable and provide minimal indication of backlash or polarization.

The number of states that legally recognize marriages for same-sex couples nearly doubled in late 2012 and early 2013. In November 2012, voters in three states legalized the freedom for same-sex couples to marry. Subsequently in June 2013, the U.S. Supreme Court invalidated a section of the Defense of Marriage Act (1996) in United States v. Windsor (2013) and vacated a Ninth Circuit decision in Hollingsworth v. Perry (2013) that in effect legalized same-sex marriage in California. Prior to this period, six states and the District of Columbia had legally recognized same-sex marriage. To what extent do competing theories of opinion change explain attitudes on gay marriage in light of these major events? And how do attitudes change in policy contexts where same-sex marriage becomes legal? Mass publics may respond to the introduction of policy, and this has been referred to as policy feedback (Kreitzer, Hamilton, and Tolbert 2014; Soss and Schram 2007). There is still debate, however, whether and to what extent these policy changes may subsequently affect the public.

We propose four models of attitude change in response to policy development. Policy introduction, especially regarding minority populations, likely causes backlash (Mucciaroni 2008; Rosenberg 2008). Policies may alternatively add greater acceptability to the issue such that their introduction legitimizes the issue and makes it familiar (Hanley, Salamone, and Wright 2012; Hooge and Meeusen 2013; Kreitzer et al. 2014; e.g., Scheingold 1974). Introduction of new policy may also polarize the public,
strengthening and widening the differences between supporters and opponents (e.g., Franklin and Kosaki 1989; Stoutenborough, Haider-Markel, and Allen 2006). Policies may instead reflect a growing consensus of social change, and thus bear no feedback effect on the public.¹ We investigate the effects of policy implementation on the attitudes of the mass public, utilizing a panel of respondents surveyed prior to and after four states introduced same-sex marriage. We unpack whether policy implementation and court action bear any effect on public opinion. We find the consensus and legitimacy models are most applicable.

Traditional approaches to public policy examine how public opinion shapes policy (Baumgartner and Jones [1993] 2009; Burstein 2003). These demand-side models generally expect that policy development should be responsive to public opinion (Erikson, Wright, and McIver 1993; Lax and Phillips 2009; Page and Shapiro 1983). Some studies on economic policies identify that public policy and public opinion operate dynamically, indicating that policy opinions actually shift negatively to policy passage (Stimson, Mackuen, and Erikson 1995; Wlezien 1995). Our focus, however, is to unpack how policy implementation subsequently affects mass attitudes.

It is important to understand how policy implementation, either from the courts or from other means, may subsequently affect the attitudes of the public. Social movements, at times, seek policy solutions in order to greater instill the location of minority groups as socially acceptable. In fact, policy success is viewed as legitimating the cause (Ewick and Silbey 1995, 1998, 2003). This is a clear argument of Tom Stoddard (1997) about the legal recognition of same-sex marriages, which has fostered others to argue that same-sex marriage as a policy priority will lead to social benefits and broader inclusion of LGBT people (Wolfson 2004). While this view has not gone uncontested (e.g., Ettelbrick 1997; Polikoff 1993), evaluating whether policy gains on same-sex marriage facilitate greater acceptance both of the issue and of lesbian and gay people is what we seek to investigate.

When it comes to theorizing how policy affects mass attitudes, the literature suggests four potential effects: positive, negative, positive and negative, or none at all. As we discuss in the next four sections, we term positive effects as consistent with the expectations of a legitimacy model. We identify negative effects as consistent with the expectations of a backlash model. We consider effects that are both positive and negative as indicative of a polarization model. We finally consider no effect as suggestive of a consensus model. By using a unique, nationally representative panel of respondents, we examine within-individual change over time and how these changes may be influenced by different policy contexts. We are able to evaluate court action as respondents were surveyed prior to and following the landmark U.S. Supreme Court decisions regarding the Defense of Marriage Act and legal recognition of same-sex marriage in California. We are also able to examine how policy introduction subsequently affects mass attitudes because four states introduced same-sex marriage between the two waves.² We find legitimacy is a consistent outcome, and this provides support that policy introduction lowers disapproval of marriages for same-sex couples and lowers antigay attitudes.

Before we discuss the competing theories of attitude change in response to policy implementation, we make a careful note about issue attentiveness, same-sex marriage, and focusing events. The issue is one
of the most salient social issues in recent American politics, and the U.S. Supreme Court rulings related
to the issue likely makes it even more salient and capable of restructuring the attitudes of the public
(see e.g., Flemming, Bohte, and Wood 1997; Johnson and Martin 1998). Issues that are the most salient
should be areas ripe for investigation because if there is no evidence of policy feedback there, then it is
unlikely that the phenomenon would occur on less salient issues (Soss and Schram 2007; see e.g. on

The amount of attention people pay to an issue relates to the likelihood they will elaborate on it and
potentially change their attitudes toward it (Petty and Cacioppo 1986). By encouraging information
seeking, people who may have been uncertain about an issue may be persuaded by new information
(Alvarez and Brehm 2002). Hoekstra (2000) shows that there is much more awareness and attentiveness
to the Court and issues at hand when people are directly affected by its decisions. Focusing events
relating to same-sex marriage have the tendency to influence how much information people have and
attention people invest on the issue. Figure 1, for example, plots the amount of information people seek
over time for “Same-Sex Marriage” and the “U.S. Supreme Court” through Google searches for the
United States, California, Washington, and Utah.³
There is clearly a relationship between same-sex marriage and the tendency for people to seek out information on the subject at points in time where there is a focusing event. Nationally, this is clear when President Obama publicly changed his stance on the issue and when the U.S. Supreme Court heard the oral arguments and released its decisions on the 2013 same-sex marriage cases. Searching about the Court is also impacted by events surrounding the institution. There was much more information seeking when the Court made its decision on the Affordable Care Act and the same-sex marriage cases. Information seeking increases on both terms when the focusing events are in regard to the marriage cases.
Context is important here as well. Information seeking across different states, as represented in Figure 1, is clearly related to both national and statewide focusing events. Information seeking in California matches that of the national trends, as residents of California did not have a unique focusing event. Residents of Washington, however, voted on same-sex marriage, and there is a clear uptick in information seeking during that time. Utah also has increased searching when same-sex marriage was legalized in December 2013 due to a federal court decision. As Hoekstra (2000) convincingly argues, people pay attention to political events when the events contain some relevance to them (see also Bishin 2009; Hoekstra and Segal 1996; Hoekstra 2003). People are influenced by the social, political, and legal contexts in which they live.

People seek out information when events encourage them to focus and elaborate more on the issues underlying them. It is with extended elaboration on these issues that we consider it plausible that policy implementation and court action may relate to and change public attitudes. We are not alone in the argument that opinions are less rigid and able to change in response to major political events (Caldeira 1987; Hoekstra 1995, 2003; Pollock 1994; Stimson et al. 1995; Stimson 2004; Stoutenborough et al. 2006). There remains debate, however, regarding whether this is the case and if it is, which direction attitudes change.

**Backlash Model**

Advocates have often feared backlash—the idea that success in policy development will be followed by sharp repercussions in mass attitudes and policy (Haider-Markel 2007). Policy development for LGB rights has historically developed at the municipal level, and a distinct tactic of those opposing such developments is to disrupt them by enacting state policy (Gossett 1999), and this is largely done through direct democratic processes (Donovan, Wenzel, and Bowler 2000; Green 2000; Stone 2012). Backlash does not necessarily incur changes in policy when it comes to the court of public opinion, as the policy may be a focusing event that then incurs negative reactions among the public (e.g., Birkland 1997). Stoutenborough et al. (2006) consistently find lowered support for gay rights in response to U.S. Supreme Court decisions. This also coincides with how Bishin et al. (2015) conceptualize opinion backlash, “as a large, negative, and enduring shift in opinion against a policy of group that occurs in response to some event that threatens the status quo” (2).

We consider the definition of Bishin et al. (2015) as an appropriate framework to understand the expected outcomes of backlash for the present study:

\[ H_1 : \text{Focusing events such as judicial decisions and legal action on same-sex marriage should lower approval of same-sex marriage and acceptance of lesbian and gay people (Backlash Model).} \]

The Backlash Model may also be more greatly emphasized among people who have multiple focusing events—that there could be an added effect of policy and judicial decisions. Under this expectation, people who reside in states with focusing events on same-sex marriage unique to that state should be even more negatively affected if there is a contemporaneous national focusing event (see e.g., Hopkins...
Court action, especially the U.S. Supreme Court, is expected to generate the greatest amount of backlash (Price and Keck 2015), as legislative or direct democratic institutions are inherently responsive to the majority will (e.g., Klarman 2013, p. 167-8), which would likely not operate counter to majority opinion (but see Bishin 2009). Previous studies on this topic, however, have found little difference between court action and other forms of legal development (Post and Siegel 2007; Keck 2009; Greenhouse and Siegel 2011; Price and Keck 2015; Bishin et al. 2015).

Legitimacy Model

Laws may represent the acceptability of an issue. Judicial and legislative actions may enshrine a new policy with greater social legitimacy, through people’s own respect for the rule of law (e.g., Scheingold 1974). By embedding new policies into existing mechanisms, they are more easily a part of social life and sustain their underlying legal meaning and authority (e.g., Ewick and Silbey 1995, 1998). These new policies are also added to preexisting bureaucratic processes, facilitating in their implementation through already formalized processes and making them much more routine (e.g., Barnes and Burke 2006). Thus, policies naturalize and legitimate an issue and the group of people it represents. The policy position of the U.S. Supreme Court may also grant greater legitimacy to an issue (Marshall 1987). On the issue of legal marriage recognition for same-sex couples, this speaks to a central debate regarding same-sex marriage and social acceptance (e.g., Ettelbrick 1997; Polikoff 1993; Stoddard 1997). We conceptualize legitimacy as having the following expected outcomes of judicial and legal acts on the mass public:

\[ H_2: \] Focusing events such as judicial decisions and legal action on same-sex marriage should increase approval of same-sex marriage and acceptance of lesbian and gay people (Legitimacy Model).

Polarization Model

There has been an ongoing ideological and partisan sort among the public, and while debate remains, there is increasing agreement that people are more polarized in contemporary American politics (Levendusky 2009, 2010; Mason 2015). The predispositions people have may condition how they interpret focusing events, and those predisposed to be supportive/opposed may intensify their support/opposition (Franklin and Kosaki 1989). As these focusing events encourage greater information seeking, the addition of information has the tendency to reduce ambivalence and polarize voters (Kim et al. 2013). People may become more polarized on an issue as events surrounding it may make the issue much more consequential. We consider the following as consistent with expected outcomes of polarization:

\[ H_3: \] Focusing events such as judicial decisions and legal action on same-sex marriage should both increase and decrease approval of same-sex marriage and acceptance of lesbian and gay people (Polarization Model).
Consensus Model

Other studies contend that policy and judicial acts may simply be the enactment of the majority opinion and bear no subsequent impact on mass attitudes. That is, it is possible to consider that mass attitudes shape policy but policy does not then affect attitudes. Though there is some indication that this may not be the case in economic policy (Wlezien 1995), the issues that are “easy,” such as LGB rights issues and especially same-sex marriage, should be more stable over time (Carmines and Stimson 1981, 1989). Kreitzer et al. (2014), for example, show that 90 percent of Iowans opposed same-sex marriages prior to the 2009 Iowa Supreme Court legalizing the issue remain opposed after the ruling.

This is a model that is consistent with the perspective that institutions like the U.S. Supreme Court may be constrained in their ability to lead social change. The Court may not have the sufficient wherewithal to change policies without overcoming its constraints. One avenue for overcoming these constraints is waiting for popular consensus, making the Court a follower of political change as opposed to a leader (Rosenberg 2008). Similarly, salient social policies such as same-sex marriage are more likely to be congruent with constituent opinion, such that introducing marriage equality in a state is unlikely without a majority in support (Lax and Phillips 2009). Lax and Phillips (2009) make the case against policy feedback: “it is highly unlikely that having a progay policy is causing higher progay opinion” (p. 382; see also Erikson et al. 1993). Consensus is how we conceptualize a null model of attitude change:

\[ H_4: \] Focusing events such as judicial decisions and legal action on same-sex marriage should have no effect on approval of same-sex marriage and acceptance of lesbian and gay people (Consensus Model).

This is consistent with theories that conceptualize policy as occurring in most cases after a consensus has emerged in the polity (Habermas 1998). Legislative and judicial bodies may both be responsive to public consensus (Canes-Wrone, Clark, and Kelly 2014; Dahl 1957; Stimson et al. 1995), as electoral incentives may motivate such responsiveness (e.g., Mayhew 2004), or they may seek to avoid conflict between judicial and legislative institutions (e.g., Casillas, Enns, and Wohlfarth 2011). But such development does not occur without established consensus. While this is how we define the Consensus Model, it may also be the case that people remain unaware of the policy change. The theories and arguments we reference, however, make a stronger case for why attitudes should not shift after policy introduction or court action than simply inattentiveness or stasis, and they specifically pay attention to the establishment of public consensus as antecedent to policy change.

In order to examine the impact of same-sex marriage policy, we analyze two waves of a panel of respondents who addressed questions about their opinions on the issue and their general attitudes toward lesbian and gay people. By examining within-individual variation, we decompose the difference in over-time change to respondents who reside in states where same-sex marriage is legal in both waves, in states where it is newly legal in the second wave, and in states where it was not legal in both waves. Panel data permits examining change by policy contexts while accounting for respondents’ previous dispositions toward lesbians and gay men and same-sex marriage. This permits us to more clearly identify a policy effect, as the U.S. Supreme Court decisions should affect all of the respondents,
and each state policy context should uniquely affect those residents. Our panel permits us to examine post-policy effects while also observing variation across policy contexts, which then allows us to examine differences across different contexts. Our approach expands upon Kreitzer et al. (2014) who only examine Iowa prior to and after the Court legalized same-sex marriage in that state. A single policy context confounds the changes due to the focusing event with time, while the examination of multiple contexts accounts for such confounding.

DATA

To understand how policy introductions and legal decisions may affect the mass public, we use data from the American National Election Study (ANES) from 2012 and a re-contact study in 2013. The 2013 ANES study is a subset of the respondents who participated in the 2012 ANES Time Series study. Interviews are conducted online in the follow-up study. The 2012 ANES was administered prior to and immediately following the 2012 presidential election, in which four states faced ballot measures or referenda on same-sex marriage. The 2013 follow-up study was fielded in July, which immediately followed the historic same-sex marriage rulings by the United States Supreme Court. We analyze how attitudes change under distinct policy settings: the forty states where same-sex marriage is not legal in both waves, the six states and District of Columbia where same-sex marriage is legal in both waves, and the four states where same-sex marriage was not legal in the first wave but was legal in the second wave. A timeline of events is provided in Figure 2 to highlight the ANES administration and focusing events around same-sex marriage. This permits us to decompose variation between the two waves among: (1) the overall time trend, which includes the U.S. Supreme Court decisions; (2) the states that newly enacted same-sex marriage policies; and (3) the states that had same-sex marriage already as policy.

![Figure 2: A timeline of events relating to the administration of the 2012 ANES Time Series Study and 2013 ANES Re-contact Study. State map created by the authors and all remaining images are in the public domain (https://commons.wikimedia.org/wiki/File-President_Barack_Obama.jpg; https://www.flickr.com/photos/mattpopovich/19203743682). ANES = American National Election Study; SSM = same-sex marriage; SCOTUS = Supreme Court of the United States.](image_url)

These respondents address two questions about lesbian and gay people and rights that are asked both in the 2012 ANES and in the follow-up study. The first question is whether respondents favor legal
marriage rights for same-sex couples, favor civil unions, or do not think there should be any legal recognition. There do not appear to be any significant differences between the overall responses to this question over time. In 2012, 40.7% supported marriage, 31.4% supported civil unions, and 27.9% did not support either form of relationship recognition. In 2013, 42.4% supported marriage, 32.0% supported civil unions, and 25.6% did not support either.

Respondents were also asked their general feelings toward LGB people by a feeling thermometer score. In both waves, the median feeling thermometer score was 50, but the mean was significantly greater in 2013 by 4.18 points ($p < .05$). There are generally positive changes in attitudes toward lesbians and gay men when examining the entire distribution of responses. Figure 3 shows the differences between the thermometer scores at Wave 2 from Wave 1 in a violin plot where positive values indicate warmer attitudes at Wave 2 and negative values indicate cooler attitudes at Wave 2. Attitudes toward lesbians and gay men at Wave 2 tended to be slightly higher in the second wave. The positive difference between the two ratings shows the greatest thickening in the distribution is within 25 degrees. Wave 2 thermometer ratings had fewer respondents reporting cooler or neutral feelings. While these changes are informative about the American public’s ongoing change in attitudes toward same-sex marriage and lesbians and gay men in general, what role might policy also play?

![Figure 3: Differences in responses to the gays and lesbians feeling thermometer between the ANES 2012 and ANES 2013 re-contact study, as characterized by a violin plot. ANES = American National Election Study.](image)

In Table 1, we provide the overall breakdown of both the marriage question and the average feeling thermometer rating by state policy context. Respondents changed their opinions over these two time periods. The average thermometer scores increase among all respondents, with the greatest increase among those respondents who had same-sex marriage legalized between the survey administrations. There is not great change over time among respondents in terms of their attitudes toward same-sex marriage. The greatest shift overall is among respondents where same-sex marriage was legalized between the two waves. Respondents in that context have a 9.9 percentage point reduction in not supporting any legal recognition for same-sex couples ($p < .01$), though the other measures are not significantly different from one another.
**Table 1**: Average levels of support for relationship recognition for same-sex couples and feeling thermometers on gays and lesbians among respondents in the ANES 2012 and ANES 2013 Re-contact study, by state policy context

<table>
<thead>
<tr>
<th>Policy Status</th>
<th>Prevalence</th>
<th>M</th>
<th>CU</th>
<th>N</th>
<th>Therm</th>
<th>M</th>
<th>CU</th>
<th>N</th>
<th>Therm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM Not Legal</td>
<td>72.7</td>
<td>37.7</td>
<td>32.0</td>
<td>30.3</td>
<td>49.5</td>
<td>38.4</td>
<td>32.9</td>
<td>28.7</td>
<td>52.3</td>
</tr>
<tr>
<td>SSM Legal in Both Waves</td>
<td>11.1</td>
<td>51.1</td>
<td>36.4</td>
<td>12.4</td>
<td>54.7</td>
<td>56.5</td>
<td>27.6</td>
<td>16.0</td>
<td>56.9</td>
</tr>
<tr>
<td>SSM Became Legal</td>
<td>16.2</td>
<td>46.8</td>
<td>25.1</td>
<td>28.2</td>
<td>50.6</td>
<td>50.7</td>
<td>31.4</td>
<td>17.9</td>
<td>58.8</td>
</tr>
<tr>
<td>All states</td>
<td>--</td>
<td>40.7</td>
<td>31.4</td>
<td>27.9</td>
<td>50.3</td>
<td>42.4</td>
<td>32.0</td>
<td>25.6</td>
<td>54.6</td>
</tr>
</tbody>
</table>

Note: Obs. = 1,559; M = Marriage; CU = Civil unions; N = No legal recognition for same-sex couples; SSM = same-sex marriage

**ANALYSIS AND RESULTS**

There are a diverse set of analytical methods for panel data, and we employ the available methods that are conventionally appropriate for two wave panels with multiple repeated measures, which are more common in behavioral psychology and epidemiology (e.g., Collins 2006; Sotres-Alvarez, Herring, and Siega-Riz 2013; Wang and Wang 2012). We use latent transition analysis (LTA) to understand attitude changes. Once we describe the results from the overall latent transition model, we then employ inverse propensity score weighting to account for a host of behavioral and demographic confounders that balances our respondents in terms of their likelihood to receive levels of treatment (i.e., those residing in states without same-sex marriage legal, residing in states with it legal in both waves, and those residing in states that had it legal in the second wave). This facilitates in clarifying the effects of policy on the mass public and also in balancing for individual differences.

**Latent Transition Analysis (LTA)**

Since we have two repeated measures, we use a form of latent class analysis (LCA), which classifies respondents based upon their responses to both questions. This way, we are estimating both opinions toward same-sex marriage and attitudes toward lesbians and gay men simultaneously. This process facilitates in categorizing people into a set number of groups (or classes) as opposed to relying on a single measure, and multiple measures tend to be more reliable in public opinion research (Ansolabehere, Rodden, and Snyder 2008). LCA models have been previously used for the analysis of public opinion (Breen 2000; Blaydes and Linzer 2008; Feick 1989; Hill and Kriesi 2001a, 2001b; Linzer 2011; Linzer and Lewis 2011; McCutcheon 1985). LCA requires that the number of groups in the data be specified a priori; we specify three classes for this analysis: Favor, Ambivalent, and Oppose. LTA is an
extension of LCA, and it investigates to what degree people change their class membership over time. The probability for respondents to transition from one group to another is the focus of this investigation, and we investigate how policy influences those transitional probabilities.

Previous research finds that people tend to be in favor of, opposed to, or ambivalent to gay rights, so we use three classes to identify these three groups (Craig et al. 2005; Garner 2013). People who are attitudinally ambivalent tend to moderate their responses and bunch toward the center of response scales (Mulligan 2013), so we expect ambivalent respondents to position themselves in favor of civil unions and have about a 50 thermometer score rating. In Table 2, we provide the response probabilities to the relationship recognition item and average feeling thermometer score for the three latent classes. These measures clearly indicate that the three theoretical classes are consistent with the data. Those who are classified as being in the Favor class are 94.6% likely to endorse same-sex marriage and have an average feeling thermometer score of 73°. Those who are classified as being in the Oppose class are 83.1% likely to not endorse any form of legal recognition of same-sex couples and have an average thermometer score of 11.2°. Those who are ambivalent are 66.2% likely to endorse civil unions and have an average thermometer score of 52.3°. These response probabilities clearly identify the three groups of people we classify as Favor, Ambivalent, and Oppose.

Our examination is to evaluate the likelihood that respondents transition from one group to another over the two waves and to determine whether and how policy influences such transitions. A transitional probability is the likelihood respondents who are classified in a class at Wave 1 are classified in the same or a different class at Wave 2. These probabilities also represent the percentage of respondents who likely stay in the same class and percentage of them that move to a different class (Wang and Wang 2012). We first address the overall transitions to evaluate whether there are distinct patterns in the 8-month timeframe, which encompasses the U.S. Supreme Court’s major 2013 rulings related to same-sex marriage. Afterward, we examine each policy context, and we describe how we account for confounding to clearly identify a policy effect.

Table 2: The probability a respondent will select one of the three categories in the relationship recognition question and the average feeling thermometer by each classification. Standard errors are in the parentheses. LGB = lesbian, gay, and bisexual.

<table>
<thead>
<tr>
<th>Position on LGBs</th>
<th>Marriage Recognition Item</th>
<th>Feeling Therm.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LGB-Related Items</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marriage</td>
<td>Civil Unions</td>
</tr>
<tr>
<td>1. Favor</td>
<td>94.6 (2.7)</td>
<td>8.9 (2.4)</td>
</tr>
<tr>
<td>2. Ambivalent</td>
<td>5.2 (2.4)</td>
<td>66.2 (3.9)</td>
</tr>
<tr>
<td>3. Oppose</td>
<td>0.2 (0.6)</td>
<td>24.9 (3.6)</td>
</tr>
</tbody>
</table>
The overall transitional probabilities are provided in Figure 4. These national transitions show whether Americans changed their positions in this timeframe. People had low likelihoods of transitioning: 99.4% of people classified in the Favor class at Wave 1 stay in the Favor class at Wave 2; 93.6% of people in the Ambivalent class remain in that class; and 73.6% of those initially in the Oppose class are classified as being in the Oppose class at Wave 2. Most Americans are classified at Wave 1 in the Favor and Ambivalent classes comprising about 70% of the sample. The largest change between the two waves is among those who are opposed to lesbians and gay men in Wave 1; 26.4% of them are classified as Ambivalent in Wave 2. A plurality of Americans at Wave 2 is classified as Ambivalent. Of those who transition out of the Ambivalent class, 4.6% move to Favor and 1.9% move to Oppose. This suggests that events between the two periods encouraged some movement, and most of that movement is away from opposition.

We incorporate the state of policy to examine whether transitions differ by context. A schematic of this model is in Figure 5. In essence, the LTA incorporates policy as a covariate that influences transitional probabilities. The covariate takes the form of dichotomous variables indicating whether a respondent resided in a state with no legal marriage recognition in both waves, with legal marriage recognition in both waves, and with legal marriage recognition in Wave 2. Since we analyze only two waves of data, we are limited to observing the effect of policy implementation in an 8-month window, which “can have an effect on the results obtained[, because]...when the change process is rapid, or when certain states within a process are of short duration, individuals may pass into and out of one or more states between observations” (Collins 2006, p. 519-20). The changes we do observe, however, are likely longer lasting than mere perturbations in opinion, as most literature on the duration of effects among campaign ads and persuasion expect such effects to rapidly decay (Gerber et al. 2011; Hill et al. 2013), but certain contexts may produce longer lasting effects (Panagopoulos 2012). In our case, legal
contexts may lead to long-lasting effects, which are consistent with the Backlash, Legitimacy, and Polarization Models.

There may be a lack of covariate balance among respondents in these three different legal contexts, which indicates that policy change is not random and may be causally confounded. Auxiliary models showed that Black respondents and Evangelical respondents are more likely to be in a legal setting where same-sex marriage is not legal. This lack of balance may confound the effect of policy because those likely to receive the treatment may be respondents who are already more likely to experience attitude change. In order to more clearly identify the effect of policy, we employ covariate balancing propensity scores, which uses propensity score weights \( \pi(X_i) \) that account for individual and contextual differences (Imai and Ratkovic 2014; Fong, Ratkovic, and Imai 2014). We generate these propensity scores by balancing on demographic and behavioral characteristics that may lead to significant differences by policy context. Propensity score weighting is an acceptable approach for causal inference in latent class analysis (Buterra, Lanza, and Coffman 2014; Lanza, Coffman and Xu 2013). When we evaluate the propensity score model, we find no indication that the estimation is incorrectly specified (Hansen’s J-statistic = 16.45, 29 d.f.). We finally multiply the propensity score weights with the survey weights provided because there is lower bias in the estimation of treatment effects with complex surveys when both survey weights and propensity score weights are included (DuGoff, Schuler, and Stuart 2014).

Formally, we use a Pearlian framework for causal inference (Morgan and Winship 2007; Pearl 2009). We provide a fuller discussion using directed acyclic graphs as well as assessments of their testable implications in Appendix D. This can be considered a variant of propensity score weighted differences-in-differences estimation, which facilitates in accounting for the parallel-trend assumption (see Abadie 2005). In order to account for non-independence of observations by state, we use robust standard errors clustered by state. Since not all people residing in a context where same-sex marriage was legalized may be aware of this fact, our differences-in-differences estimates should be interpreted as Intent-To-Treat (ITT) effects. Any effects we observe may potentially be larger if we could constrain our analysis to individuals who were fully aware of the policy change.
The results of the LTA with the modeled covariate of policy are provided in Figure 6, which are transitional probabilities among different legal contexts. The weighting scheme appears to achieve balance across policy contexts, and the probability a respondent is in a policy environment is approximately equal across conditions $\Pr(x_i^{\text{policy}} = 1) = .33; \Pr(x_i^{\text{policy}} = 2) = .36; \Pr(x_i^{\text{policy}} = 3) = .31$. There is generally a high likelihood for respondents to stay in the same class, a result similar to the overall transitions. Most individuals who are initially classified as Favor tend to not move away from that position regardless of policy context. The percentages of staying in the Favor class ranges from 99.3 to 100 percent. A similar but slightly weaker pattern is present for the Ambivalent. The percent of the Ambivalent staying Ambivalent ranges from 89 to 100 percent.

There are unique transitions by policy contexts, especially among those classified in the Oppose class. Among respondents who are in a context where same-sex marriage is not legal in both waves, 23.8% of those who were in the Oppose class in Wave 1 are Ambivalent in Wave 2. This transition is smaller in states that already had legalized same-sex marriage at 5.4%. The largest transition is observed among those who were in the Oppose class in a context where same-sex marriage became legal between the two waves. Those who are opposed in Wave 1, 47.0% of them transition to ambivalence, which is two times greater than those similarly situated in a context where same-sex marriage is not legal.

Figure 6 also reports differences-in-differences estimates on these transitional probabilities. If we consider the difference-in-difference estimate among respondents who resided in a state changing marriage policy versus those who did not, the transitional probability differences from Oppose to Ambivalent are statistically significant ($\text{DD} = 47.0 - 23.8 = 23.2$, s.e. = 9.1, $p < .05$). This indicates an additional 23.2 percentage point reduction of those who are in the Oppose class due to policy introduction. We also find large differences in the transitions between areas that had same-sex marriage legalized and where it was already legal. The difference-in-difference effect between the transitions from Oppose to Ambivalent is 41.6% (s.e. = 11.3, $p < .05$). This suggests that those who are opposed in a context where same-sex marriage is already legal are more resistant to changing their minds when compared to those in other contexts. This is also supported by comparing the transition from the Oppose class in legal contexts where there was no change. The transition probability away from Oppose in a policy context where same-sex marriage was already legal is about five times smaller than the transition in context where same-sex marriage was never legal.

Figure 6 also indicates that there is very little movement from Favor toward Oppose, and transitions away from Ambivalent are more likely to Favor than Oppose. These transitions and their differences-in-differences tend to not be statistically significant, and they are substantively much smaller when compared to the transitions away from the Oppose class. The size of these classes also reveals a pattern: the Oppose class is small and is likely to comprise a smaller set of individuals who are more reluctant to moderate their opinions.
DISCUSSION

We propose four models regarding how legislation and litigation may subsequently affect mass attitudes: a Backlash Model, a Consensus Model, a Legitimacy Model, and a Polarization Model. Quite strikingly, our analysis provides strong support for consensus and legitimacy while backlash and polarization have minimal support. The vast majority of our respondents did not change their positions when surveyed in Wave 2. This applies support for a model of consensus, where policy may reflect the public sentiment and not then affect the attitudes of the public. Consensus was also observed in a single repeated measure in the case of Iowa (Kreitzer et al. 2014).

Of the respondents that do change their attitudes, there is very clear evidence of the expectations of the Legitimacy Model. Respondents, especially those who experience a change in policy, tend to transition from Oppose → Ambivalent → Favor, and the largest transitions are observed from Oppose to Ambivalent. This indicates that policy implementation plays a role in encouraging people to reconsider their previous opinions on same-sex marriage and attitudes toward lesbians and gay men. A very small and statistically insignificant minority of respondents transitioned to Oppose, and the few of them that did came from the Ambivalent class. Ambivalence, as presently defined, allows people to position themselves as neutral on issues (Mulligan 2013), so movement away from that position could potentially be an even shift to Favor and Oppose. But we do not observe even transitioning among the Ambivalent, those who do transition are consistently more likely to be in the Favor class versus the Oppose class. This also suggests that these focusing events do less to polarize voters. Additionally, our classification of the three groups did not change between the two waves (see footnote 7), but under a Polarization
Model, we should have observed stronger response probabilities on same-sex marriage and polar thermometer scores among those in the Favor and Oppose classes.

Over this 8-month window we find that law has its own contribution to public support for minority groups. Though it has been well documented that law may operate to grant legitimacy to social movements and generate change among political institutions (e.g., Scheingold 1974), our findings identify another outcome caused by policy and legal development: altering the pre-existing attitudes of the mass public. These attitudes should generally only change across generational cohorts because opinions on same-sex marriage may be considered symbolic and easily decided on a gut level (Carmines and Stimson 1981, 1989). We find that attitudes change over time following policy changes. This supports the role that instilling new policy supportive of a minority group fosters greater approval or (at least) ambivalence toward that group. If anything, the reduction in anti-gay attitudes is a signal that policy is instituting a new norm: that being anti-gay is socially unacceptable (see also Kreitzer et al. 2014). We find this is the case in the overall transitions and residents of states where same-sex marriage was not legal. Their transitions, however, pale in comparison to residents of states where same-sex marriage became the law of the land. In that context, we found nearly double the amount of attitude change. States where same-sex marriage became legal with the Court decisions are likely the most susceptible to backlash. And yet, we fail to find the large and long-lasting negative reaction to these policies being introduced.

These findings also address a long-standing hypothesis regarding same-sex marriage and overall attitudes toward lesbians and gay men. Tom Stoddard (1997) hypothesized, quite clearly: the right to marry would “most likely…lead ultimately to a world free from discrimination against lesbians and gay men” (p. 682). There are political benefits to same-sex marriage; to Stoddard, “the pursuit of marriage was the most effective way for testing commitment of straights to the principle of full equality for LGBT people” (Ball 2009, p. 499). While questions in the LGBT community may continue regarding whether same-sex marriage should be pursued (e.g., Ettelbrick 1997; Polikoff 1993), Stoddard poses empirical expectations of the development of same-sex marriage policy. Our findings provide some indication that Stoddard’s hypothesis is supported. Policy change, by our analysis, led 23.2 percent of those who are opposed – that is people who oppose any form of legal recognition of same-sex marriage and people who on average report 11.1° as how coldly they feel about lesbians and gay men – to be ambivalent, which means that they now tend to support legally recognizing same-sex couples in the form of civil unions and have an average thermometer rating of 52.3°. With the United States Supreme Court legalizing same-sex marriage in *Obergefell v. Hodges* (2015), our findings indicate that this development likely furthers the positive attitude changes Americans have experienced in recent history.
NOTES

1 Also, consensus may mean that people are unaware of the policy change and do not “receive the
treatment.”

2 We are unfortunately unable to unpack whether and how the policy was introduced (e.g., via
legislative, direct initiative, or courts) affects attitudes due to data limitations.

3 The searches made on search engines like Google, from some perspectives, may serve as
operationalizing the issue-agendas of a population (Scharkow and Vogelgesang 2011).

4 The online re-contact study actually adds greater robustness to our findings, as online interviews tend
to lower the potential for social desirability bias (Kreuter, Presser, and Tourangeau 2013), which has
been a noted issue when measuring opposition to same-sex marriage (Powell 2013).

5 Throughout the analysis, the District of Columbia is considered a state, which legally recognizes
marriages for same-sex couples.

6 We acknowledge that there are different approaches to the analysis of ambivalence by the use of
heteroskedastic regressions that model the error variance (e.g., Alvarez and Brehm 1995, 1997, 2002).
While debate is present, we rely on Mulligan (2013) who showed that attitudinal ambivalence has more
to do with moderation than with variability.

7 In traditional LTA models, these response probabilities are invariant over time. This means, for
example, that the probability a respondent would endorse same-sex marriage in the Favor class is held
constant between both time periods. We tested an auxiliary model allowing these response probabilities
to vary over time, which was not significantly different from the invariant model ($\chi^2 = 10.4, p = 0.32$).
Since there is no difference, we select the invariant model as it is more parsimonious.

8 All LTA models are estimated using Mplus, a program for latent variable modeling (Muthen and
Muthen 1998-2012). To model a categorical covariate, we used the KNOWNCLASS option.
Poststratification weights provided in the re-contact study were used in all analyses for the overall
transitions; propensity score weights were applied in the following section in addition to the
poststratification weights.

9 We balance on: political knowledge; a traditionalism scale ($\alpha = 0.70$); an abortion index ($\alpha = 0.88$); a
patriotism index ($\alpha = 0.80$); a conservative index ($\alpha = 0.84$); ideological self-placement; gender;
race/ethnicity; age cohort; educational attainment; partisanship; identification as Born Again; LGB
population density by state; and having a LGB friend, family member, or co-worker.
REFERENCES


United States v. Windsor. 570 U.S. 12.


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