Changing Hearts and Minds?
Why Media Messages Designed to Foster Empathy Often Fail

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Online Appendix

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A   Survey Administration and Sampling Details

A.1   Details of Study 1 Samples

All respondents received an invitation to participate as well as two reminders, three and six days after the initial invitation in January 2012. The emails referred to the study as the "[State Name] Issues Survey" and mentioned the state legislative session, upcoming elections, and "important political issues," but made no particular mention of immigrants or Latinos. In total, 3,498 individuals participated in the experiment.

A.1.1   Sample 1: Voters

Participants in Sample 1 were recruited from an online panel consisting of a probability sample of statewide voters obtained from statewide exit poll studies conducted at polling places across the state on election day in 2004, 2006, 2008, and 2010. Voters were sampled for the exit poll using standard sampling procedures (with a random start) as they exited their polling places. One of the exit poll questionnaires was devoted to recruiting a sample of voters for an Internet survey panel. Thus, unlike some online surveys that are conducted with convenience samples, our sample is a representative probability sample of statewide voters. We invited 5,513 panel members to complete the survey experiment, with 517 completing the survey, for a response rate of 9.38 percent. We excluded non-whites and Latinos and those who reported being unable to view the video treatments, leaving 418 voters in our sample for analysis.

A.1.2   Sample 2: Citizen Activists
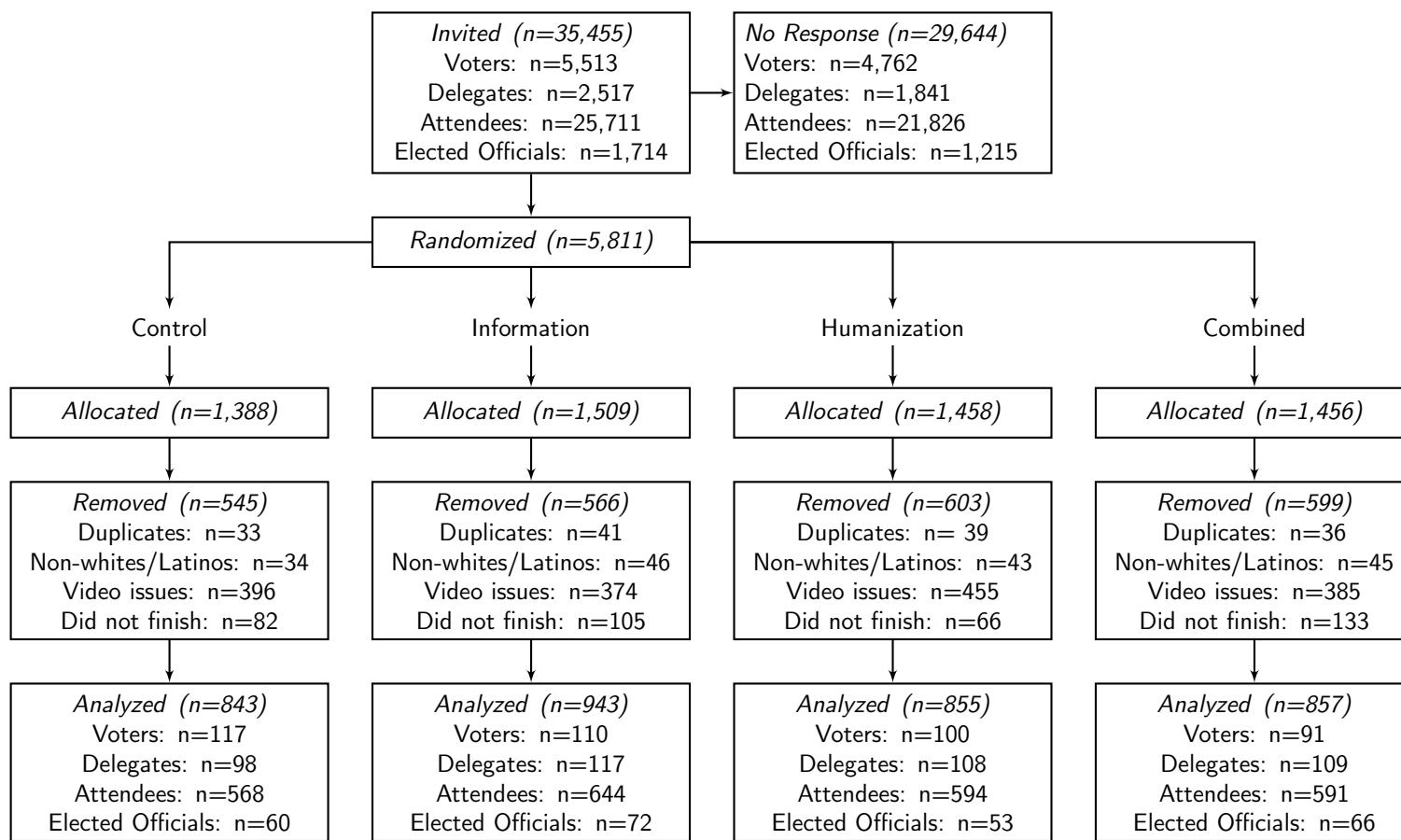
In Sample 2, participants were drawn from two groups of citizen activists in the state. The first group consisted of Republican voters who attended precinct-level caucus meetings along with the delegates to the state convention selected at those caucus meetings prior to the 2010 election. These citizen activists were highly involved in the state's politics at the neighborhood level and above. Email coverage for the approximately 3,000 delegates selected at the meetings is quite high with 2,517 delegates with listed email addresses available for the study. Additionally, 25,711 caucus attendees provided email addresses. We invited all those in both groups with listed email addresses (28,228) to participate in the study, with 3,380 completing the survey, for a response rate of 11.97 percent. When we excluded non-whites and Latinos and those who reported being unable to view the video treatments, we had 2,829 from the citizen activist sample for analysis.

A.1.3   Sample 3: Elected Officials

The third sample came from lists of local elected officials obtained from state institutions. These lists included emails for elected mayors, city council members, elected county commissioners and other elected county officers. As they were compiled originally for a separate study conducted eighteen months earlier, we updated the lists using results from local elections in 2011. A very small number of elected officials, usually in small towns, were inaccessible by email, but overall we invited 1,714 elected officials to participate and 321 completed the survey, for a response rate of 18.73 percent. When we excluded non-whites and Latinos and those who reported being unable to successfully view the video treatments, 251 elected officials were available for analysis.

In sum, the total number of participants in all three experiments was 3,498.

Figure A.1: Flowchart of participants' progress in study 1

2
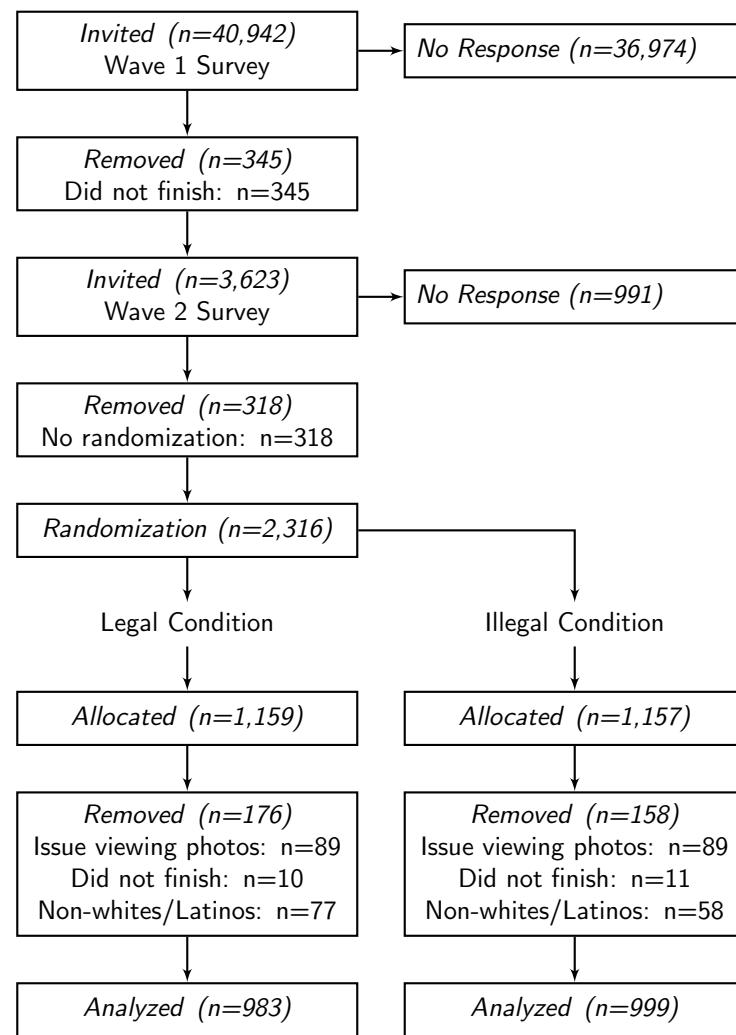
A.2   Details of Study 2 Samples

As in Study 1, Study 2 again used online panel data consisting of a probability sample of statewide voters obtained from statewide exit poll studies conducted at polling places across the state on election day in 2004, 2006, 2008, and 2010. Voters were sampled from the exit polling data following the same procedure as in Study 1, although based on the results of Study 1, the participants for Study 2 were more narrowly targeted from a geographic subsection of the state that had a substantially higher proportion of Republican registrants and identifiers. We also did not separately target voters vs. elected officials. As in Study 1, recruiting materials did not mention immigrants or Latinos specifically.

For wave 1 of the survey, we sent 40,942 email invitations (and two reminders) in late August and early September 2015. The emails invited participants, "to participate in an important new research project about attitudes toward different social issues" and mentioned that if they chose to participate they would complete two surveys and react to a set of images chosen by the researchers. 3,968 individuals began the survey (a 9.7% response rate), with 3,623 fully completing the survey. For wave 2 of the survey, we emailed these same 3,623 individuals 1-2 weeks later (mid-September 2015), with 2,632 (72.6%) responding to the survey, though 318 of these were not randomized because they did not have the needed measures for block randomization. When we exclude non-white and Latino respondents, those who had difficulties viewing the images, and those who did not finish the survey, we arrive at a sample of 1,982 individuals for analysis.

Figure A.2: Flowchart of participants' progress in study 2

| Invited (n=40,942)
Wave 1 Survey | → | No Response (n=36,974) |

| Removed (n=345)
Did not finish: n=345 |

| Invited (n=3,623)
Wave 2 Survey | → | No Response (n=991) |

| Removed (n=318)
No randomization: n=318 |

| Randomization (n=2,316) |

| Legal Condition | Illegal Condition |

| Allocated (n=1,159) | Allocated (n=1,157) |

| Removed (n=176)
Issue viewing photos: n=89
Did not finish: n=10
Non-whites/Latinos: n=77 | Removed (n=158)
Issue viewing photos: n=89
Did not finish: n=11
Non-whites/Latinos: n=58 |

| Analyzed (n=983) | Analyzed (n=999) |

B   Survey Measures

B.1   Measure of Outgroup Antipathy

The outgroup antipathy measure used in study 1 consisted of three items (see bold statements in Table B.1), while the antipathy measure in study 2 used all nine items.

Participants rated their agreement with these statements on a 1–7, and item 4 was reverse-coded.

Table B.1: Outgroup Antipathy Index

Sub-measure	Question
(OD)	**"In general, illegal immigrants care less about morals than legal residents of the state."**
(OD)	"In general, illegal immigrants are more prone to violence than legal residents of the state."
(OD)	"In general, illegal immigrants are lazy."
(IG)	**"Illegal immigrants have moral values and customs from which legal residents of the state could learn."** (reversed)
(IG)	"Of all the groups in the state, legal residents typically work the hardest."
(IG)	"Of all the groups in the state, legal residents are generally more moral and honest than the others."
(IVO)	**"Legal residents of the state have suffered more from illegal immigration than have illegal immigrants."**
(IVO)	"The real victims of illegal immigration are the legal residents of the state."
(IVO)	"Providing increased opportunities (jobs, education) for illegal immigrants in the state means decreasing opportunities for legal residents."

OD = Outgroup Denigration, IG = Ingroup Glorification, IVO = Ingroup Victimhood Orientation
Bolded items comprised the three-item measure employed in Study 1.

The left column of Figure B.3 shows the distribution of antipathy across respondents for Study 1, and the right panel shows the distribution of those who completed both waves of Study 2.
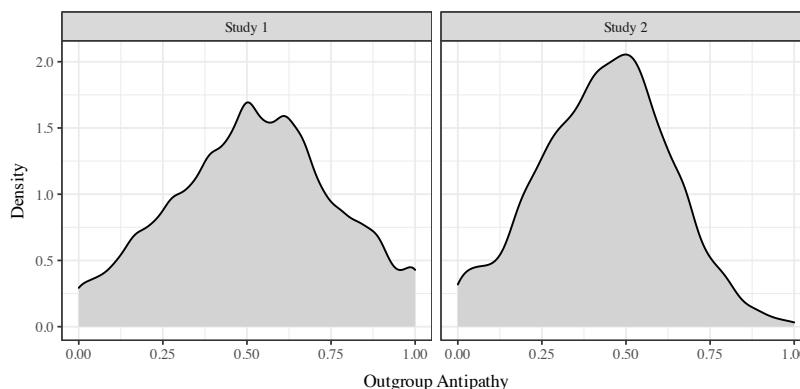

Figure B.3: Kernel density plots for Outgroup Antipathy measure, from study 1 (n = 3,489) in the left panel and study 2 (n = 1,982) in the right panel. Note the n-size for study 1 differs from that in the paper because of 9 respondents for whom we do not have a pre-treatment measure of outgroup antipathy.

B.2 Humanization

Participants indicated the extent to which they felt illegal immigrants in the state are likely to feel each of the following emotions on a 1–7 scale:

- Admiration
- Love

B.3 Empathy

Participants indicated how much they felt each of the following emotions on a 1–7 scale:

- Sympathetic
- Moved
- Compassionate
- Warm
- Soft-hearted
- Tender

B.4 Dissonance

Participants indicated how much the following words described how they were feeling after the treatments on a 1–7 scale:

- Uncomfortable
- Uneasy
- Bothered
- Tense
- Concerned

B.5 Policy Questions

In both studies, participants were asked to think about immigrants living in the U.S. illegally and consider which of the following options for immigration reform came closest to their view:

- Illegal immigrants should be required to go home immediately
- Most illegal immigrants should be required to go home, but some should be allowed to remain in the U.S. under a temporary guest worker program
- Most illegal immigrants should be allowed to stay in the U.S. but only as temporary workers who must eventually return home
- Illegal immigrants should be allowed to stay permanently in the U.S.

This four-point scale was reverse-coded so that higher numbers indicate more support for immediately sending illegal immigrants home.

Additionally, both studies asked participants to state how much they agree with four hypothetical state laws:

- The state should pass a law requiring that all official documents be in English only.
- The state should pass a law requiring illegal immigrants who live in [state] to pay out-of-state tuition at state colleges and universities.
- The state should pass a law restricting welfare support to legal residents of the state only.
- The state should pass a law increasing the penalties on employers who hire illegal immigrants.

Agreement was measured on a 1–7 scale.

In study 1, two additional questions were used for the index. The first introduced the Arizona law in the following manner: "As you may know, the state of Arizona recently passed a law that gives the police the power to question someone they have already stopped or arrested about their legal status in the country. Under the law, the police may turn over confirmed illegal aliens to federal custody." They were then asked to indicated how much they favored the law on a 1–5 scale. Lastly, they were also asked how much they favored a bill that had been proposed in the state based on the Arizona law, also on a 1–5 scale, which was described as "requiring local police to check the immigration status of those arrested on felony or serious misdemeanor charges."

In study 2, three additional questions were used for the index. Agreement with the following question was asked on a 1–5 scale:

- People who immigrated *illegally* should be allowed to benefit from government assistance programs like Medicaid and food stamps. (**Reverse coded)

  And agreement with the two following questions was asked on a 1–7 scale:

- Providing increased opportunities (jobs, education) for illegal immigrants in [state] means decreasing opportunities for legal residents.

- Given the current illegal immigration situation in [state], denying illegal immigrants some basic constitutional rights is justified to get the situation under control.

C   Validation of Outgroup Antipathy Measure

We ran a large (n=2,791) pilot test using university students in the same western state to assess the degree to which this measure correlates with other common measures of outgroup sentiment, in particular: a feeling thermometer towards Latinos, ethnocentrism as operationalized by Kinder and Kam (2009), social dominance orientation (SDO, Ho et al., 2015), and the 4-item authoritarianism measure (Hetherington and Suhay, 2011). The correlation matrix and plots in Figure C.4 present Pearson correlations between our antipathy measure and these other measures. The main diagonal shows the distribution of each measure. Below the diagonal are two-dimensional density plots showing the relationship between each measure, and the correlations are presented above the diagonal.

There is a clear correlation between outgroup antipathy and these other measures. The strongest correlation is with ethnocentrism (0.37) and SDO (0.39) and the weakest with authoritarianism (0.21), while a negative correlation with the Latino feeling thermometer sits in the middle (-0.34). These correlations are all moderate in size and in the directions expected. Together, these results comprise clear evidence that our measure, while correlated as expected with these others, captures something unique. In part, these differences are a function of the fact that our measure specifically highlights the relationship between legal residents of the state and a minority outgroup (undocumented Latino immigrants), while the other measures are focused on Latinos generally (the feeling thermometer), the relationship between Latinos and Whites generally (ethnocentrism), a general commitment to hierarchy (SDO), or the importance of policing group boundaries (authoritarianism).

Theoretically, we chose our measure of outgroup antipathy, adapting it from work developed and validated by scholars like Bar-Tal (2009; 2012), Shnabel et al. (2009), Roccas (2006; 2008), and others, because it captured not just negative attitudes or feelings towards the outgroup, but instead captured a particular set of attitudes that would be challenged if one began to view the outgroup with true empathic concern (i.e. as deserving of help as self). In addition, the individual items request a comparison between undocumented Latino immigrants and the legal residents of the state, while the other measures do not focus on this particular contrast. For all these reasons, our measure of outgroup antipathy better matches our theory about how dissonance disrupts the connection between empathy and political attitudes than other measures of anti-Latino attitudes, hierarchical worldviews, or authoritarianism.

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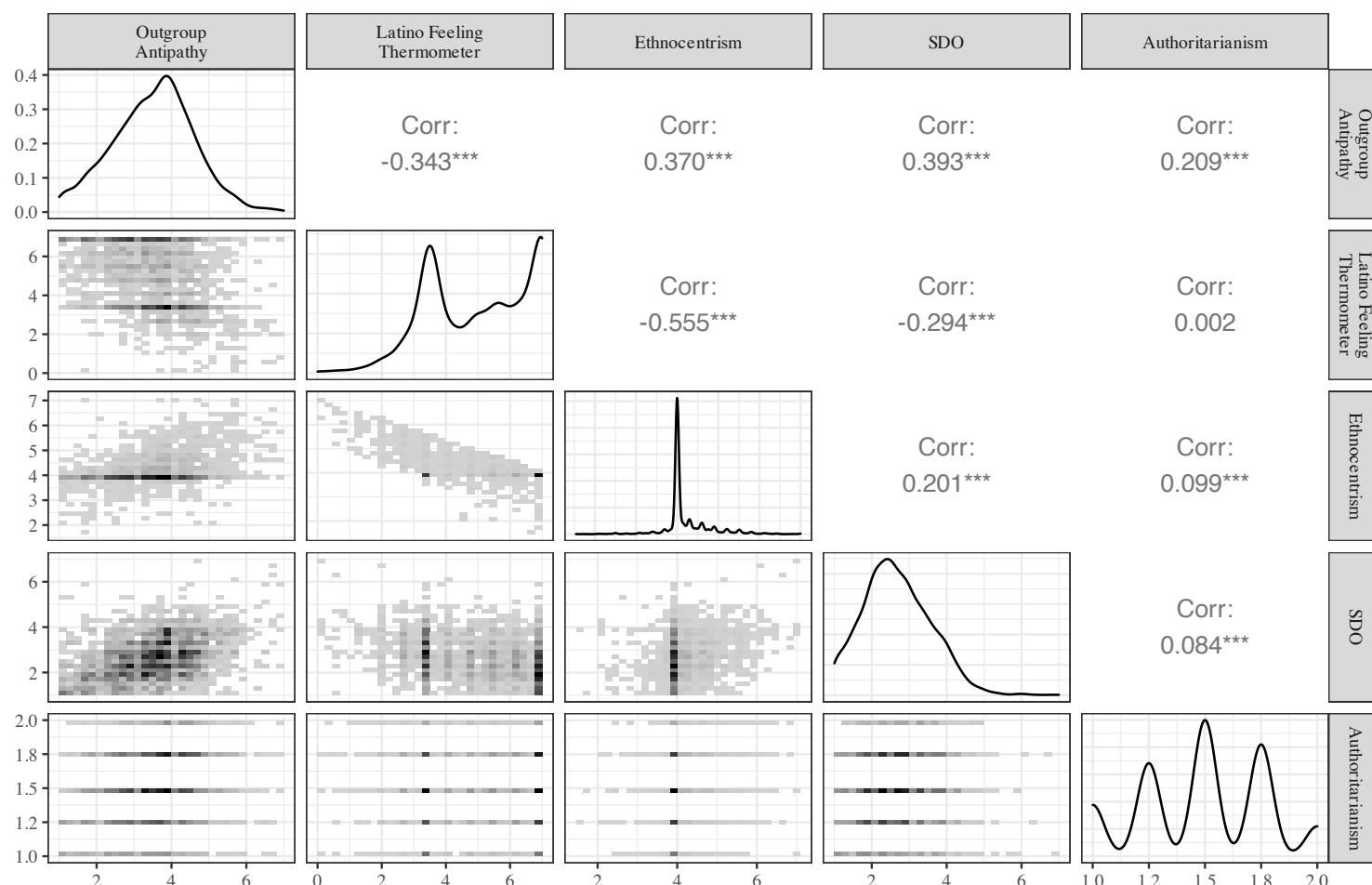
Figure C.4: Correlation Matrix and 2D Density Plots of Outgroup Antipathy and Other Common Measures.

D   Factor Analysis of Policy Items

Both studies combine several policy outcomes into an index measuring support for policies harmful toward illegal immigrants. We used factor analysis to determine which policy outcomes were included in our indices, while ensuring overlap between the studies on five of the items included in the index.

Figure D.5 shows the factor and principal components analysis for the 10 policy outcome measures in study 1. These outcomes include:

- Four questions regarding hypothetical laws harming immigrants—"Law (English)", "Law (Tuition)", "Law (Welfare)", and "Law (Hire)"—asking participants' level of support for laws mandating English-only government forms, out-of-state tuition for illegal immigrants, limiting of welfare assistance for them, and strengthening penalties for employers who hire them, respectively. These questions were included in both studies.
- One question asking about participants' preferred course of action toward illegal immigrants in the US (reverse-coded so that higher values indicate more support for requiring all illegal immigrants to immediately go home)—"Immigration Opinion". This question was included in both studies.
- Two questions regarding the Arizona law SB 1070 and its counterpart in the state where this study took place—"Arizona Law" and "State Bill Harm".
- Three questions regarding state bills that would help immigrants—"State Bill Help 1", "State Bill Help 2", and "State Bill Help 3"—asking participants' level of support for proposed bills that would create a guest-worker program for illegal immigrants, allow citizens of the state to sponsor immigrants, and establish a federal visa partnership with a Mexican state.

As can be seen in Figure D.5, seven of these questions grouped very closely and loaded onto a single factor (see questions circled on the figure). An index of these seven questions—the four regarding hypothetical laws, the immigration opinion question, and the Arizona law and its local imitator—was created as our main policy outcome for study 1.

Figure D.6 shows the factor and principal components analysis for the 14 policy outcome measures in study 2. In addition to the questions regarding hypothetical laws and immigration opinion, this study also included questions on:

- One question evaluating zero-sum thinking when it comes to opportunities (jobs, education, etc.) for legal and illegal residents—"Taking Resources".
- One question asking whether denying basic constitutional rights to illegal immigrants is justifiable in the current context—"Should Deny Rights".
- Two questions regarding immigrants access to government assistance programs—"Aid Legal" and "Aid Illegal"—asking participants' level of support for allowing government assistance to, respectively, legal and illegal immigrants.
- Five questions focusing on participants' perceptions of whether immigrants become a part of and contribute to American communities. Three of them—"Don't Give Back", "Not Bothered To Learn", and "Should Try Harder"—focus on negative perceptions of immigrants abilities to assimilate, while two of them—"See Themselves American" and "Assimilate Well"—focus on positive perceptions.

Of these questions, three of them—"Taking Resources", "Should Deny Rights", and "Aid Illegal"—scaled well with the five questions included in study 1, for a total of eight questions (see questions circled in Figure D.6) which were combined into a single index.
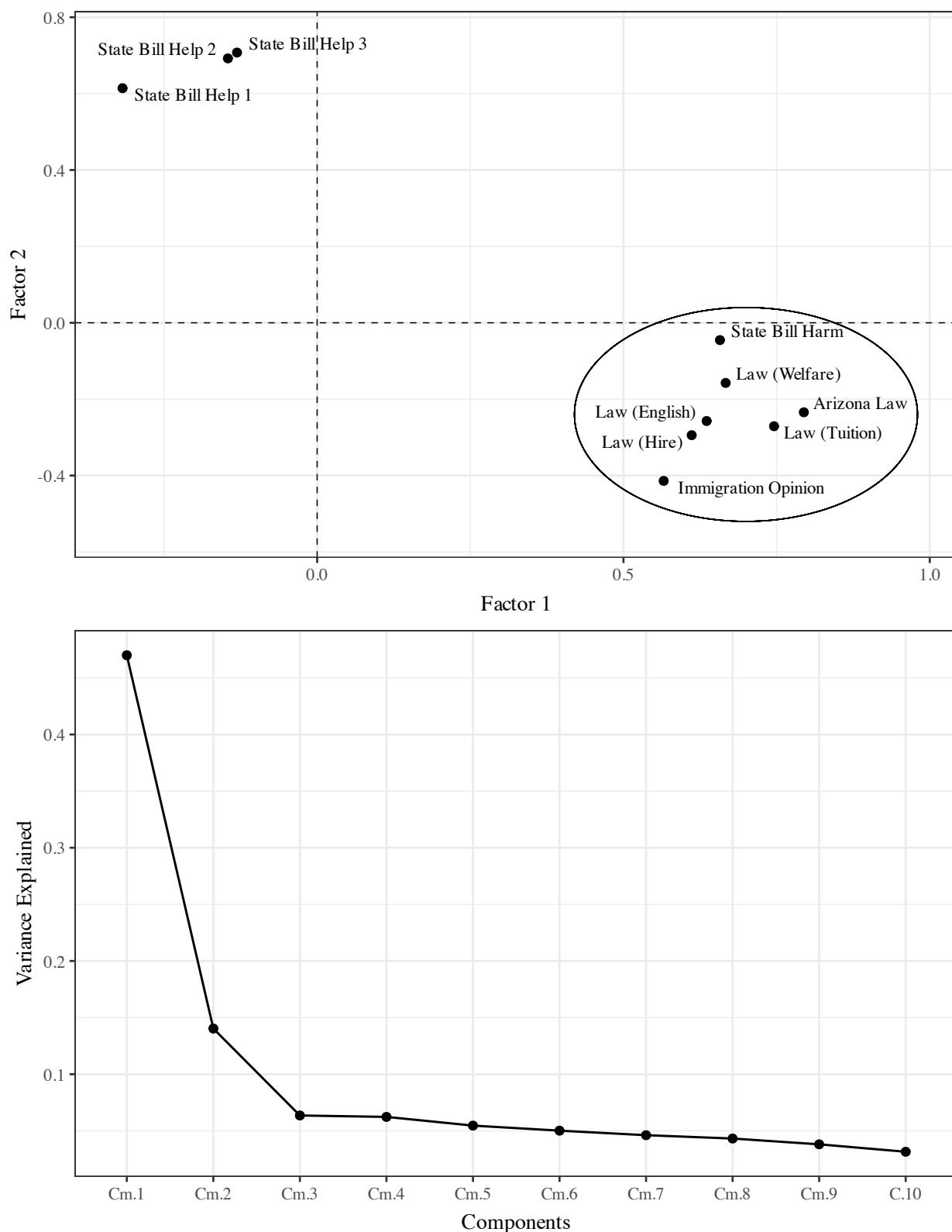
Figure D.5: Factor and Principal Components Analysis plots for 10 policy outcome measures in study 1.
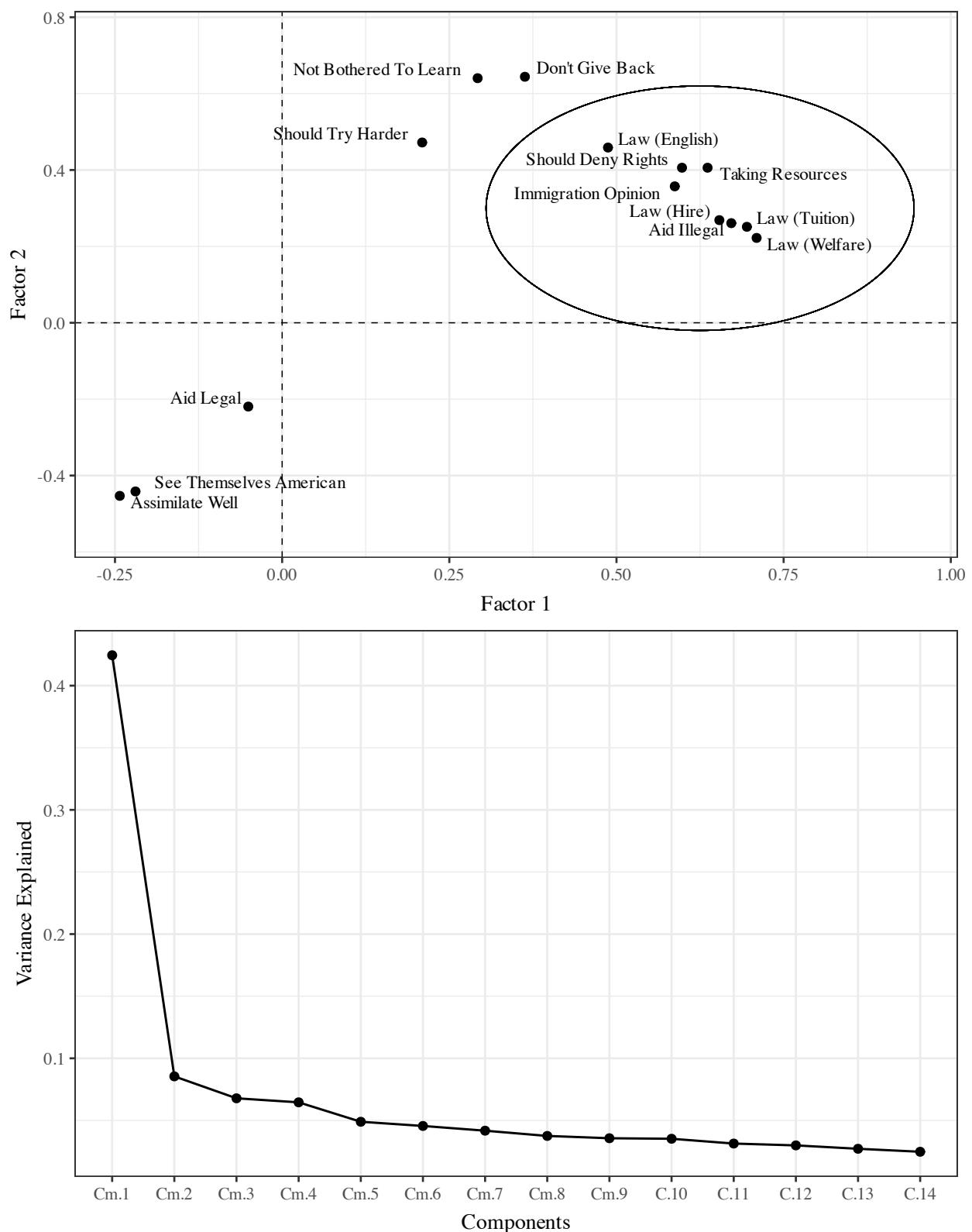
Figure D.6: Factor and Principal Components Analysis plots for 14 policy outcome measures in study 2.

E Treatments
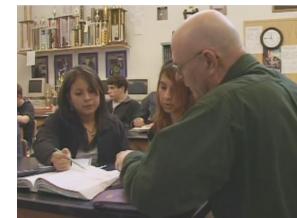
E.1 Storyboards for Study 1 Experimental Treatments

Table E.2: Storyboard for Treatment 1, Humanization (109 seconds)

Narrator: "Meet Ricardo. He's a fifth grader at [CITY's] Spring Creek Elementary."	
"And here is his older sister Flor. She is a junior at [CITY] High School. Both children do well in school, but their success has not been without struggle. Ricardo and Flor's parents brought the family to [CITY] in search of a better life. For the most part, they say they've found it."	
Christina: "My husband came alone first. It's very difficult when a marriage separates and one stays while the other goes. It's difficult. They suffer because they're alone, and we suffer because we're alone too in Mexico. Our first hope was to come to the U.S. so that our children would have a better upbringing, a better future, a different life. In all aspects, it's a very nice life."	
"This is a very good state. I don't want to move to another town. I've always liked [CITY] and we've been really happy here. It's a place where there are police, where there are rules, and there's a peacefulness that's totally different than where we lived in Mexico. I know that we're safe, and that my children are safe as well."	
"We speak little English, but I think we support them with our love. My biggest dream is for my kids to become great professionals. So my children don't have to make hamburgers like me."	

Table E.3: Storyboard for Treatment 2, Immigration Information (50 seconds)

"As the population of [STATE] grows, the state is changing and facing new challenges. The stereotype of [STATE] as a rather bland, white bread kind of place grows less relevant by the week."	
"And nowhere is this evidence of ethnic change more pronounced than in some of the state's elementary schools. At some schools, Hispanic enrollment exceeds 50% of the student body and pressure mounts on existing resources."	
"A graph tells the story. Population in the state of [CITY] grew at a steady pace during the past two decades. During the same time, the Hispanic population in the state increased at a much higher rate. But the capacity of our schools remains nearly unchanged. These patterns represent a particular challenge that [CITY] must adapt to. In a state with an increasing Hispanic population, how do we handle the difficulties presented by growth and change?"	
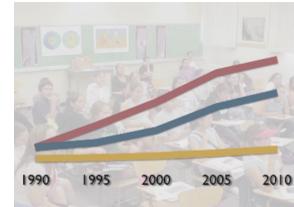
Table E.4: Storyboard for Treatment 4, Control/Transportation (48 seconds)
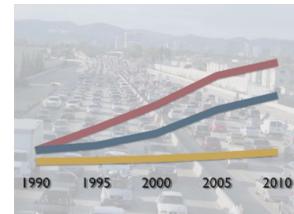
"As the population of [STATE] grows, the state is changing and facing new challenges. In pursuit of more affordable land, people move farther from work, school, and shopping."	
"Families buy extra cars to cope with the logistics of suburban living. The number and length of car trips increase, and pressure mounts on existing roads."	
"A graph tells the story. Population in the state of [STATE] grew at a steady pace during the past two decades. During the same time, the number of miles residents traveled by car increased at a much higher rate. But the number of traffic lanes available on area roads remains nearly unchanged. These patterns represent a particular challenge that [STATE] must adapt to. In a state with increasing transportation needs, how do we handle the difficulties presented by growth and change?"	

E.2   Study 2 Treatment Images

Table E.5: Examples of Study 2 Images

E.3   Balance

This section provides summaries of balance on covariates between treatment groups. Omnibus balance statistics are provided in Table E.6, while figures showing standardized differences for individual covariates are found in Figure E.7. These results indicate imbalances for gender and age for some treatments, but omnibus balance tests for the treatments indicate that we cannot reject the null of a balanced sample.

Table E.6: Omnibus Balance Tests

	Chi Squared	Degrees of Freedom	P-value
Study 1, Humanization	11	14	0.72
Study 1, Information	9.9	14	0.77
Study 1, Combined	20	14	0.14
Study 2, Illegal Condition	12	8	0.16
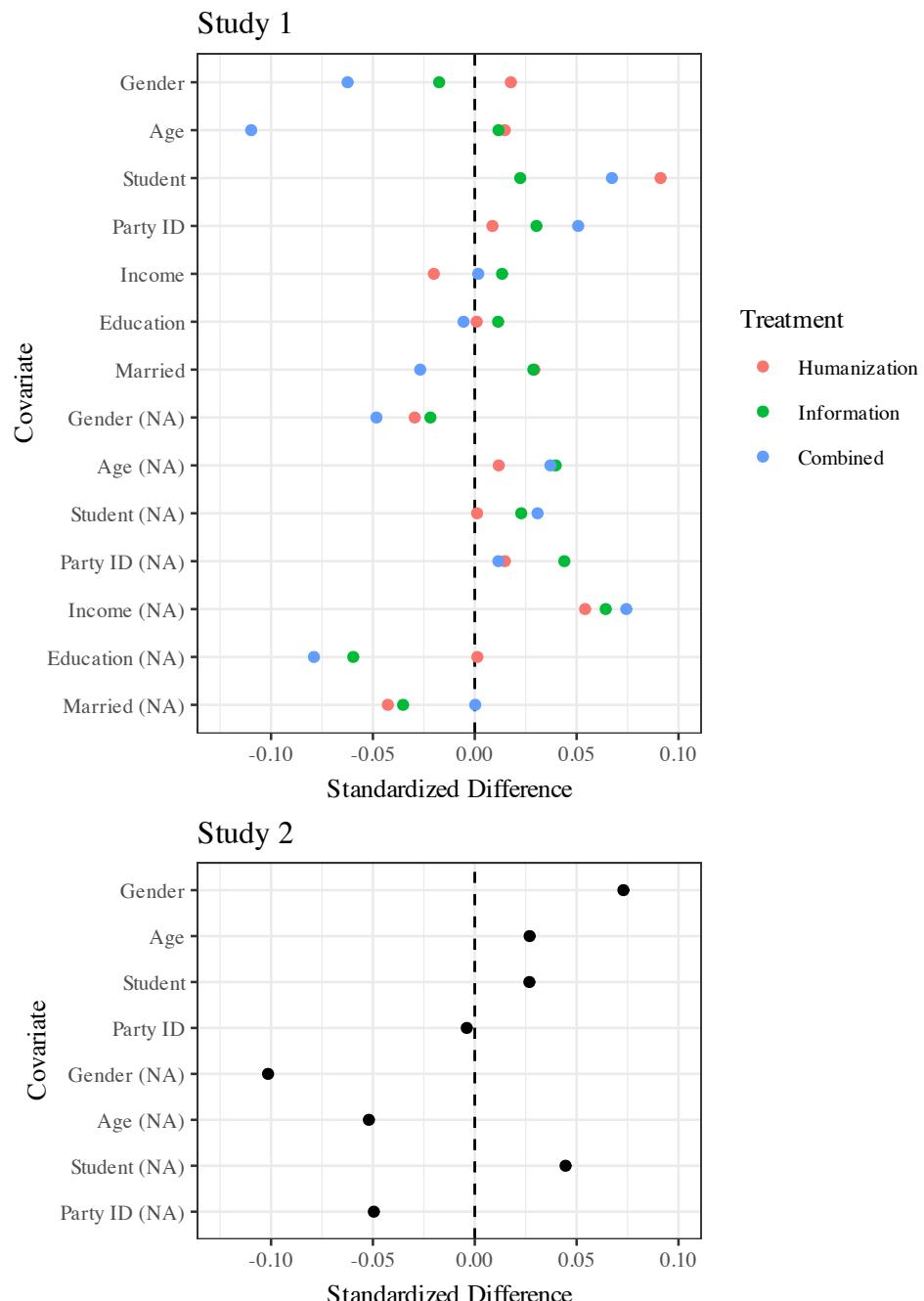
Figure E.7: Balance in Studies 1 and 2.

F   Descriptive Statistics

Table F.7: Key Survey Demographics

Characteristic	Study 1		Study 2	
	N	%/Mean	N	%/Mean
Overall N	3,498		1,982	
Gender: Female	1,251	35.8%	1,168	58.9%
Male	2,247	64.2%	809	40.8%
Did not answer	18	<1%	5	<1%
Age:		51.0		28.0
Did not answer	59	1.7%	7	<1%
Student: Yes	75	2.1%	281	14.2%
No	3,403	97.3%	1,700	85.8%
Did not answer	20	<1%	1	<1%
Party ID: 1–7, 7 = Strong Republican		6.0		5.6
Did not answer/Other	173	4.9%	14	<1%
Income: Less than $49,999	696	19.9%		
$50,000–$74,999	783	22.4%		
$75,000–$99,999	764	21.8%		
$100,000–$149,999	747	21.4%		
More than $150,000	370	10.6%		
Did not answer	138	3.9%		
Education: Some high school or less	4	<1%		
High school graduate	102	2.9%		
Some college	809	23.1%		
College graduate	1380	39.5%		
Post-graduate	1190	34.0%		
Did not answer	13	<1%		
Marital Status: Married	3,108	88.9%		
Single	180	5.2%		
Divorced	110	3.1%		
Other	77	2.2%		
Did not answer	23	<1%		

G   Supporting Tables

G.1   Changing Hearts, Study 1

This section provides supporting tables for the figures shown in the Study 1 subsection of the section titled "Changing Hearts: Humanization and Empathy." Each of the three tables corresponds to one of the figures from the paper, addressing the effect of the treatments on humanization of and empathy toward the outgroup.

The first column of Table G.8 corresponds to Figure 2 in the paper, with each point corresponding to a combination of a treatment condition and level of outgroup antipathy. For instance, the two point estimates in the figure for the control condition correspond to the coefficient on "Intercept" for those with low outgroup antipathy and the sum of the coefficients on "Intercept" and "Outgroup Antipathy" for those with high outgroup antipathy. The p-values quoted in the paper come from two hypothesis tests, one comparing high antipathy in control to high antipathy in the humanization treatment (which is just a joint test of the coefficients on "Humanization" and "Humanization $\times$ Antipathy" and corresponds to a p-value of less than 0.001) and the other comparing low antipathy in control to low antipathy in the humanization treatment (which is a test of the coefficient on "Humanization" by itself and also corresponds to a p-value of less than 0.001).

The first column of Table G.9 corresponds to Figure 3 in the paper. For instance, the leftmost point estimate for the marginal effect of the humanization treatment on empathy corresponds to the coefficient on "Humanization" from this table (0.56). The table illustrates the same result as the figure, which is that the effect of the treatment on empathy varies greatly based on participants levels of outgroup antipathy.

Lastly, the first column of Table G.10 corresponds to Figure 4 in the paper. The only difference between this model and the one highlighted in Table G.9 is that this model uses a dichotomous measure for outgroup antipathy, as in Table G.8. The point estimates in the figure correspond to coefficients (or combinations of coefficients) in the regression. For instance, the figure's point estimate for the control treatment corresponds to the coefficient on "Outgroup Antipathy," while the figure's point estimate for the information treatment corresponds to the sum of the coefficients on "Outgroup Antipathy" and "Information $\times$ Antipathy."

Table G.8: Regression of Humanization on Treatments × Antipathy (Dichotomous), Controls, Study 1

	(1)	(2)	(3)
Intercept	0.51***	0.59***	0.67***
	(0.01)	(0.01)	(0.03)
Humanization	0.13***	0.10***	0.10***
	(0.01)	(0.02)	(0.02)
Information	−0.03*	−0.05**	−0.05**
	(0.01)	(0.02)	(0.02)
Combined	0.13***	0.10***	0.10***
	(0.01)	(0.02)	(0.02)
Outgroup Antipathy		−0.15***	−0.15***
		(0.02)	(0.02)
Humanization × Antipathy		0.08**	0.07**
		(0.02)	(0.03)
Information × Antipathy		0.05*	0.05†
		(0.02)	(0.02)
Combined × Antipathy		0.05*	0.06*
		(0.02)	(0.03)
Gender (1 = Female)			−0.04***
			(0.01)
Age			−0.00***
			(0.00)
Party ID (0–1)			0.02
			(0.02)
N	3309	3305	3134
R^2	0.08	0.12	0.13
adj. R^2	0.08	0.12	0.13
Resid. sd	0.26	0.25	0.25

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table G.9: Regression of Empathic Concern on Treatments × Antipathy (Continuous), Controls, Study 1

	(1)	(2)	(3)
Intercept	0.27***	0.30***	0.20***
	(0.01)	(0.02)	(0.03)
Humanization	0.35***	0.56***	0.56***
	(0.01)	(0.02)	(0.02)
Information	0.09***	0.24***	0.24***
	(0.01)	(0.02)	(0.02)
Combined	0.34***	0.55***	0.55***
	(0.01)	(0.02)	(0.02)
Outgroup Antipathy		−0.05†	−0.07*
		(0.03)	(0.03)
Humanization × Antipathy		−0.40***	−0.40***
		(0.04)	(0.04)
Information × Antipathy		−0.29***	−0.29***
		(0.04)	(0.04)
Combined × Antipathy		−0.40***	−0.40***
		(0.04)	(0.04)
Gender (1 = Female)			−0.03***
			(0.01)
Age			0.00***
			(0.00)
Party ID (0–1)			0.05**
			(0.02)
N	3439	3433	3239
R^2	0.32	0.42	0.43
adj. R^2	0.32	0.42	0.43
Resid. sd	0.23	0.21	0.21

Standard errors in parentheses

† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

Table G.10: Regression of Empathic Concern on Treatments × Antipathy (Dichotomous), Controls, Study 1

	(1)	(2)	(3)
Intercept	0.27***	0.28***	0.21***
	(0.01)	(0.01)	(0.02)
Humanization	0.35***	0.43***	0.44***
	(0.01)	(0.01)	(0.02)
Information	0.09***	0.14***	0.15***
	(0.01)	(0.01)	(0.01)
Combined	0.34***	0.42***	0.42***
	(0.01)	(0.01)	(0.01)
Outgroup Antipathy		−0.02	−0.02
		(0.01)	(0.02)
Humanization × Antipathy		−0.16***	−0.16***
		(0.02)	(0.02)
Information × Antipathy		−0.11***	−0.12***
		(0.02)	(0.02)
Combined × Antipathy		−0.16***	−0.16***
		(0.02)	(0.02)
Gender (1 = Female)			−0.04***
			(0.01)
Age			0.00***
			(0.00)
Party ID (0–1)			0.01
			(0.02)
N	3439	3433	3239
R^2	0.32	0.38	0.40
adj. R^2	0.32	0.38	0.39
Resid. sd	0.23	0.22	0.21

Standard errors in parentheses

† significant at $p < .10$; $^*p < .05$; $^{**}p < .01$; $^{***}p < .001$

G.2 Changing Hearts, Study 2

This section provides supporting statistics and tables for the figures shown in the Study 2 subsection of the section titled "Changing Hearts: Humanization and Empathy."

The first figure in this section of the paper, Figure 5, shows point estimates and normal-based confidence intervals for wave 1 and wave two humanization measures, separated out by level of outgroup antipathy. The p-values discussed in relation to this figure come from two separate paired t-tests, the first a paired difference-in-means test for low antipathy respondents (with an estimate of -0.08, $t = -13.9$, $p < 0.001$) and the second for high antipathy respondents (with an estimate of -0.08, $t = -11.4$, $p < 0.001$).

Both panels in Figure 6 of the paper, on the other hand, correspond to the model summarized in the first column of Table G.11. In the upper panel of the figure in the paper, each point corresponds to a combination of treatment condition and level of outgroup antipathy. For instance, the upper-left point corresponds to the coefficient on "Intercept," while the lower-right point corresponds to the sum of all the coefficients. In the lower panel, the difference between the point estimates corresponds to the coefficient on the interaction term in the model ("Illegal Condition × Antipathy"), which has a p-value of less than 0.01.

Table G.11: Regression of Empathic Concern on Treatments × Antipathy (Dichotomous), Controls, Study 2

	(1)	(2)	(3)
Intercept	0.63***	0.69***	0.65***
	(0.01)	(0.01)	(0.02)
Illegal Condition	−0.04***	−0.02*	−0.02*
	(0.01)	(0.01)	(0.01)
Outgroup Antipathy		−0.14***	−0.14***
		(0.01)	(0.01)
Illegal Condition × Antipathy		−0.05**	−0.05**
		(0.02)	(0.02)
Gender (1 = Female)			0.04***
			(0.01)
Age			0.00***
			(0.00)
Party ID (0–1)			−0.03
			(0.02)
N	1977	1977	1962
R^2	0.01	0.16	0.17
adj. R^2	0.01	0.16	0.17
Resid. sd	0.22	0.20	0.20

Standard errors in parentheses
[†] significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

G.3 Dissonance as a Mechanism

This section provides supporting statistics and a table for the figure shown in the section titled "Dissonance as a Mechanism."

The figure in this section of the paper, Figure 7, shows four point estimates that each correspond to the self-reported dissonance for subjects in four categories, a combination of treatment condition and level of outgroup antipathy. The figure is based on the model shown in Table G.12. For instance, the upper-left point in Figure 7 in the paper corresponds to the sum of the coefficients on "Intercept" and "Outgroup Antipathy." The p-values discussed in relation to this figure also come from this model. The first, which compares high versus low outgroup antipathy participants in the control condition, corresponds to the p-value for the coefficient on "Outgroup Antipathy," which is less than 0.001. The second, which compares the two treatment conditions for low outgroup antipathy respondents, corresponds to the p-value for the coefficient on "Illegal Condition," which is 0.06. Lastly, the third, which compares how much more dissonance increased because of the treatment for high versus low outgroup antipathy respondents, corresponds to the p-value for the coefficient on "Illegal Condition $\times$ Antipathy," which is 0.04.

Table G.12: Regression of Dissonance on Treatments $\times$ Antipathy (Dichotomous), Controls, Study 2

	(1)	(2)	(3)
Intercept	0.27***	0.24***	0.30***
	(0.01)	(0.01)	(0.02)
Illegal Condition	0.04***	0.02†	0.02*
	(0.01)	(0.01)	(0.01)
Outgroup Antipathy		0.05***	0.06***
		(0.01)	(0.01)
Illegal Condition $\times$ Antipathy		0.05*	0.05*
		(0.02)	(0.02)
Gender (1 = Female)			−0.03**
			(0.01)
Age			−0.00***
			(0.00)
Party ID (0–1)			−0.01
			(0.02)
N	1982	1982	1966
R^2	0.01	0.04	0.05
adj. R^2	0.01	0.04	0.05
Resid. sd	0.22	0.22	0.22

Standard errors in parentheses

† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

G.4   Changing Minds about Policy

This section provides supporting tables for the results in the section of the paper titled "Changing Minds about Policy." Tables G.13 and G.14 provide an estimation of the models with control variables in addition to what is shown in the paper. Tables G.15 and G.16, on the other hand, show the same models with our dichotomous measure of outgroup antipathy.

Table G.13: Regression of Policy Harm on Treatments × Antipathy (Continuous), Controls, Study 1

	(1)	(2)	(3)
Intercept	0.71***	0.57***	0.39***
	(0.01)	(0.01)	(0.02)
Humanization	−0.01	−0.00	−0.00
	(0.01)	(0.01)	(0.01)
Information	0.01	0.03*	0.03*
	(0.01)	(0.01)	(0.01)
Combined	−0.01	0.01	0.00
	(0.01)	(0.01)	(0.01)
Outgroup Antipathy		0.27***	0.25***
		(0.01)	(0.01)
Humanization × Antipathy		−0.01	−0.01
		(0.02)	(0.02)
Information × Antipathy		−0.03†	−0.03†
		(0.02)	(0.02)
Combined × Antipathy		−0.02	−0.02
		(0.02)	(0.02)
Gender (1 = Female)			0.00
			(0.01)
Age			0.00*
			(0.00)
Party ID (0–1)			0.19***
			(0.01)
N	3489	3482	3281
R^2	0.00	0.33	0.36
adj. R^2	0.00	0.33	0.36
Resid. sd	0.22	0.18	0.18

Standard errors in parentheses

† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

Table G.14: Regression of Policy Harm on Treatments × Antipathy (Continuous), Controls, Study 2

	(1)	(2)	(3)
Intercept	0.62***	0.52***	0.36***
	(0.01)	(0.01)	(0.02)
Illegal Condition	−0.03**	−0.03**	−0.03**
	(0.01)	(0.01)	(0.01)
Outgroup Antipathy		0.25***	0.22***
		(0.01)	(0.01)
Illegal Condition × Antipathy		0.02	0.01
		(0.02)	(0.02)
Gender (1 = Female)			−0.02**
			(0.01)
Age			0.00***
			(0.00)
Party ID (0–1)			0.20***
			(0.02)
N	1982	1982	1966
R^2	0.00	0.30	0.35
adj. R^2	0.00	0.30	0.35
Resid. sd	0.23	0.19	0.19

Standard errors in parentheses

[†] significant at $p < .10$; [*]$p < .05$; [**]$p < .01$; [***]$p < .001$

Table G.15: Regression of Policy Harm on Treatments × Antipathy (Dichotomous), Controls, Study 1

	(1)	(2)	(3)
Intercept	0.71***	0.36***	0.26***
	(0.01)	(0.01)	(0.02)
Humanization	−0.01	−0.00	−0.01
	(0.01)	(0.02)	(0.02)
Information	0.01	0.04*	0.04*
	(0.01)	(0.02)	(0.02)
Combined	−0.01	−0.00	−0.00
	(0.01)	(0.02)	(0.02)
Outgroup Antipathy		0.67***	0.65***
		(0.02)	(0.02)
Humanization × Antipathy		−0.01	−0.01
		(0.03)	(0.03)
Information × Antipathy		−0.06†	−0.06†
		(0.03)	(0.03)
Combined × Antipathy		−0.01	−0.01
		(0.03)	(0.03)
Gender (1 = Female)			−0.00
			(0.01)
Age			0.00
			(0.00)
Party ID (0–1)			0.12***
			(0.01)
N	3489	3482	3281
R^2	0.00	0.51	0.52
adj. R^2	0.00	0.51	0.52
Resid. sd	0.22	0.15	0.15

Standard errors in parentheses

† significant at $p < .10$; $^*p < .05$; $^{**}p < .01$; $^{***}p < .001$

Table G.16: Regression of Policy Harm on Treatments × Antipathy (Dichotomous), Controls, Study 2

	(1)	(2)	(3)
Intercept	0.62***	0.25***	0.19***
	(0.01)	(0.01)	(0.02)
Illegal Condition	−0.03**	−0.04*	−0.04*
	(0.01)	(0.02)	(0.02)
Outgroup Antipathy		0.85***	0.80***
		(0.03)	(0.03)
Illegal Condition × Antipathy		0.03	0.03
		(0.04)	(0.04)
Gender (1 = Female)			−0.02*
			(0.01)
Age			0.00**
			(0.00)
Party ID (0–1)			0.09***
			(0.01)
N	1982	1982	1966
R^2	0.00	0.53	0.54
adj. R^2	0.00	0.52	0.53
Resid. sd	0.23	0.16	0.16

Standard errors in parentheses

[†] significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

H   Additional Results

H.1   Marginal Effects on Empathic Concern in Study 2

Though not reported in the paper, significant marginal effects exist between the treatment condition and a continuous measure of outgroup antipathy in study 2, as evidenced in Table H.17 and Figure H.8. These effects are in the same direction as, but a smaller magnitude than, the effects found in study 1.

Table H.17: Regression of Empathic Concern of Treatment and Outgroup Antipathy (Continuous), Study 2

	(1)	(2)	(3)
Intercept	0.63***	0.84***	0.76***
	(0.01)	(0.02)	(0.02)
Illegal Condition	−0.04***	0.01	0.01
	(0.01)	(0.02)	(0.02)
Outgroup Antipathy		−0.48***	−0.51***
		(0.03)	(0.03)
Illegal Condition × Antipathy		−0.13**	−0.13**
		(0.04)	(0.04)
Gender (1 = Female)			0.03***
			(0.01)
Age			0.00***
			(0.00)
Party ID (0–1)			0.05**
			(0.02)
N	1977	1977	1962
R^2	0.01	0.25	0.26
adj. R^2	0.01	0.25	0.26
Resid. sd	0.22	0.19	0.19

Standard errors in parentheses

[†] significant at $p < .10$; [*]$p < .05$; [**]$p < .01$; [***]$p < .001$
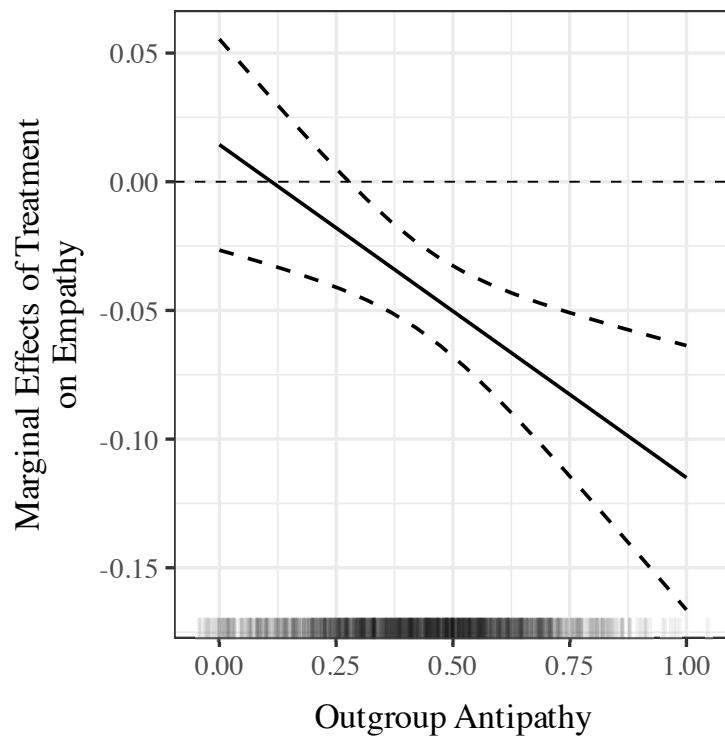
Figure H.8: Figure showing the marginal effects of the treatment on empathic Concern, by outgroup antipathy (study 2). Rug plot of outgroup antipathy included; bars represent 95% confidence intervals

H.2 Effects by Study 1 Samples

As noted in the paper, our study 1 participants were recruited from three main groups: an online panel of statewide voters (Voters), two groups of citizen activists who were delegates for or attendees of precinct-level caucus meetings (Activists), and lists of local elected officials obtained from state institutions. There was little variation among these populations in terms of how the treatments, and their interaction with outgroup antipathy, affected our outcomes of interest. Results broken down by these three samples can be seen in Tables H.18, H.19, and H.20.

Table H.18: Regression of Humanization on Pre-Treatment Antipathy and Treatments, Study 1, by Sample

	Everyone	Voters	Activists	Elected Officials
Intercept	0.59***	0.66***	0.57***	0.59***
	(0.01)	(0.03)	(0.01)	(0.04)
Humanization	0.10***	0.03	0.11***	0.07
	(0.02)	(0.04)	(0.02)	(0.06)
Information	−0.05**	−0.04	−0.05**	−0.01
	(0.02)	(0.04)	(0.02)	(0.06)
Combined	0.10***	0.04	0.12***	0.08
	(0.02)	(0.05)	(0.02)	(0.06)
Outgroup Antipathy	−0.15***	−0.31***	−0.13***	−0.20**
	(0.02)	(0.06)	(0.02)	(0.06)
Antipathy × Humanization	0.08**	0.20**	0.06*	0.12
	(0.02)	(0.08)	(0.03)	(0.09)
Antipathy × Information	0.05*	0.16*	0.04	0.09
	(0.02)	(0.08)	(0.03)	(0.08)
Antipathy × Combined	0.05*	0.20*	0.03	0.09
	(0.02)	(0.08)	(0.03)	(0.09)
N	3305	405	2662	238
R^2	0.12	0.13	0.12	0.12
adj. R^2	0.12	0.11	0.12	0.09
Resid. sd	0.25	0.25	0.25	0.24

Standard errors in parentheses

[†] significant at $p < .10$; [*] $p < .05$; [**] $p < .01$; [***] $p < .001$

Variables are on a 0–1 scale

Table H.19: Regression of Empathic Concern on Pre-Treatment Antipathy and Treatments, Study 1, by Sample

	Everyone	Voters	Activists	Elected Officials
Intercept	0.28***	0.30***	0.27***	0.28***
	(0.01)	(0.03)	(0.01)	(0.03)
Humanization	0.43***	0.42***	0.44***	0.43***
	(0.01)	(0.04)	(0.02)	(0.05)
Information	0.14***	0.12**	0.14***	0.21***
	(0.01)	(0.04)	(0.02)	(0.05)
Combined	0.42***	0.41***	0.42***	0.42***
	(0.01)	(0.04)	(0.02)	(0.05)
Outgroup Antipathy	−0.02	0.01	−0.02	0.03
	(0.01)	(0.05)	(0.02)	(0.05)
Antipathy × Humanization	−0.16***	−0.19**	−0.16***	−0.21**
	(0.02)	(0.06)	(0.02)	(0.07)
Antipathy × Information	−0.11***	−0.09	−0.11***	−0.21**
	(0.02)	(0.06)	(0.02)	(0.07)
Antipathy × Combined	−0.16***	−0.15*	−0.17***	−0.16*
	(0.02)	(0.06)	(0.02)	(0.08)
N	3433	412	2773	248
R^2	0.38	0.40	0.37	0.42
adj. R^2	0.38	0.39	0.37	0.41
Resid. sd	0.22	0.21	0.22	0.20

Standard errors in parentheses
[†] significant at $p < .10$; [*]$p < .05$; [**]$p < .01$; [***]$p < .001$
Variables are on a 0–1 scale

Table H.20: Regression of Policy Harm on Pre-Treatment Antipathy and Treatments, Study 1, by Sample

	Everyone	Voters	Activists	Elected Officials
Intercept	0.57***	0.47***	0.59***	0.57***
	(0.01)	(0.03)	(0.01)	(0.03)
Humanization	−0.00	0.02	0.00	−0.05
	(0.01)	(0.03)	(0.01)	(0.05)
Information	0.03*	0.00	0.04**	−0.04
	(0.01)	(0.03)	(0.01)	(0.05)
Combined	0.01	0.03	0.01	−0.06
	(0.01)	(0.04)	(0.01)	(0.05)
Outgroup Antipathy	0.27***	0.34***	0.25***	0.27***
	(0.01)	(0.05)	(0.01)	(0.05)
Antipathy × Humanization	−0.01	−0.00	−0.02	0.02
	(0.02)	(0.06)	(0.02)	(0.07)
Antipathy × Information	−0.03[†]	−0.01	−0.04*	0.01
	(0.02)	(0.06)	(0.02)	(0.07)
Antipathy × Combined	−0.02	−0.04	−0.02	−0.01
	(0.02)	(0.06)	(0.02)	(0.07)
N	3482	417	2815	250
R^2	0.33	0.38	0.31	0.35
adj. R^2	0.33	0.37	0.31	0.33
Resid. sd	0.18	0.20	0.17	0.19

Standard errors in parentheses
[†] significant at $p < .10$; [*]$p < .05$; [**]$p < .01$; [***]$p < .001$
Variables are on a 0–1 scale

H.3 Marginal Effects by Political Ideology and Party ID

Some readers may wonder the extent to which outgroup antipathy and political ideology or party identification are related. In both studies, there is very little evidence that political ideology or party identification has an interaction effect with the treatments that is similar to that of antipathy, as shown in Figures H.9, H.10, and H.11. This is true when looking at either empathy or policy outcomes. However, this conclusion should be tempered by the fact that our sample is heavily skewed toward conservatives and Republicans, as can be seen by the rug plots at the bottom of each figure.
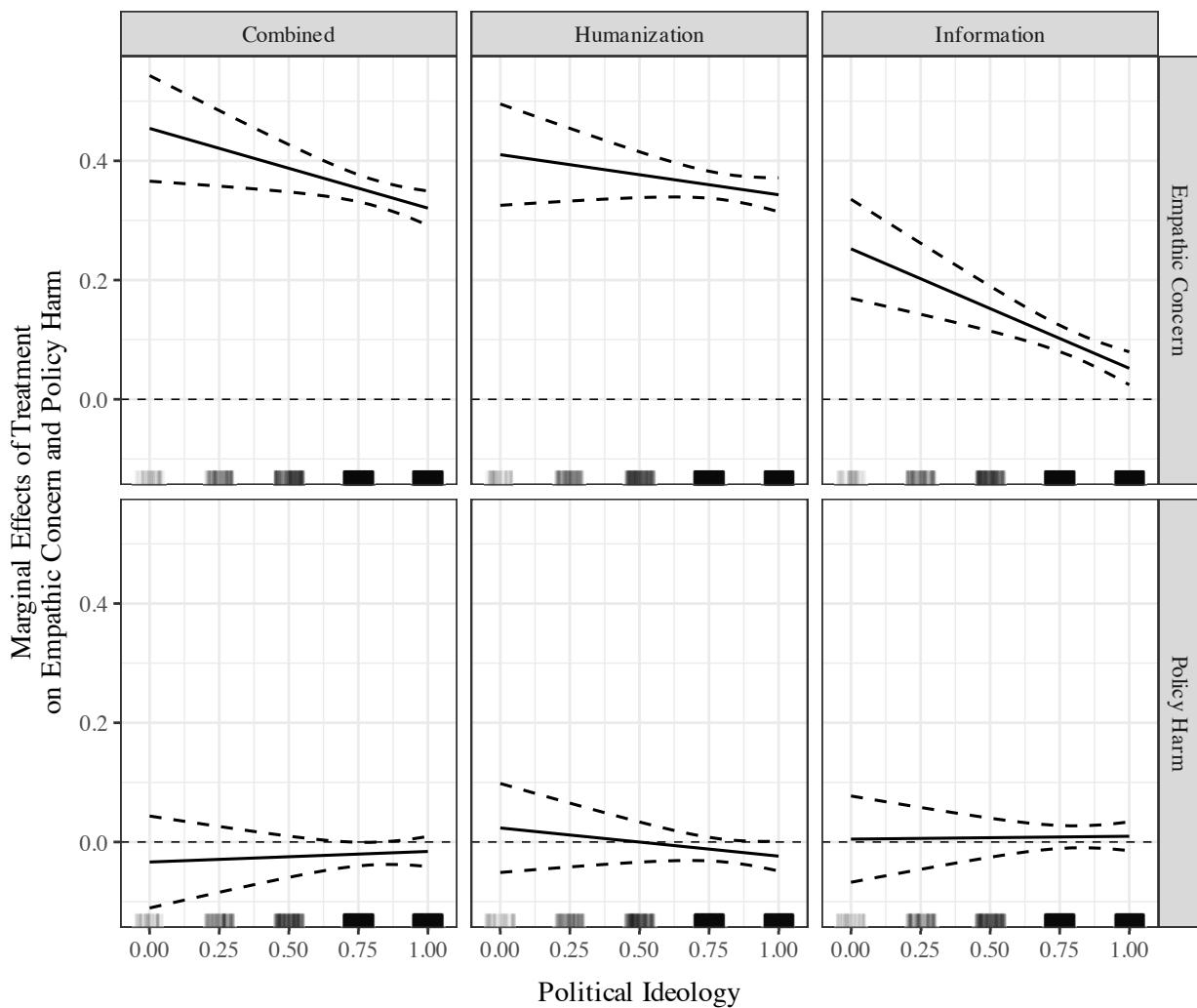

Figure H.9: Figure showing the marginal effects of the treatments on empathic concern and policy harm, by Political Ideology, for Study 1. Rug plot of Party ID included; bars represent 95% confidence intervals.
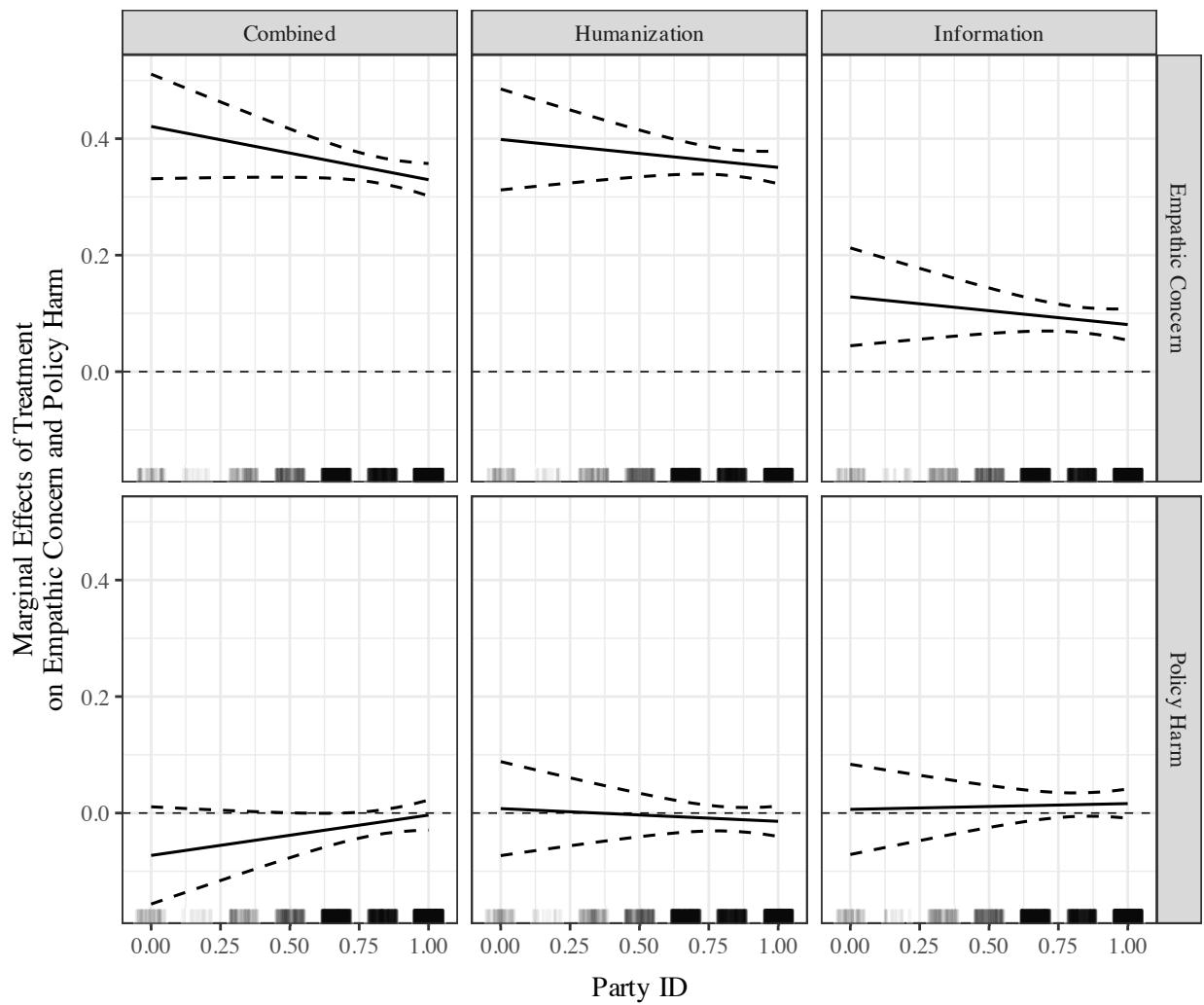
Figure H.10: Figure showing the marginal effects of the treatments on empathic concern and policy harm, by Party ID, for Study 1. Rug plot of Party ID included; bars represent 95% confidence intervals.
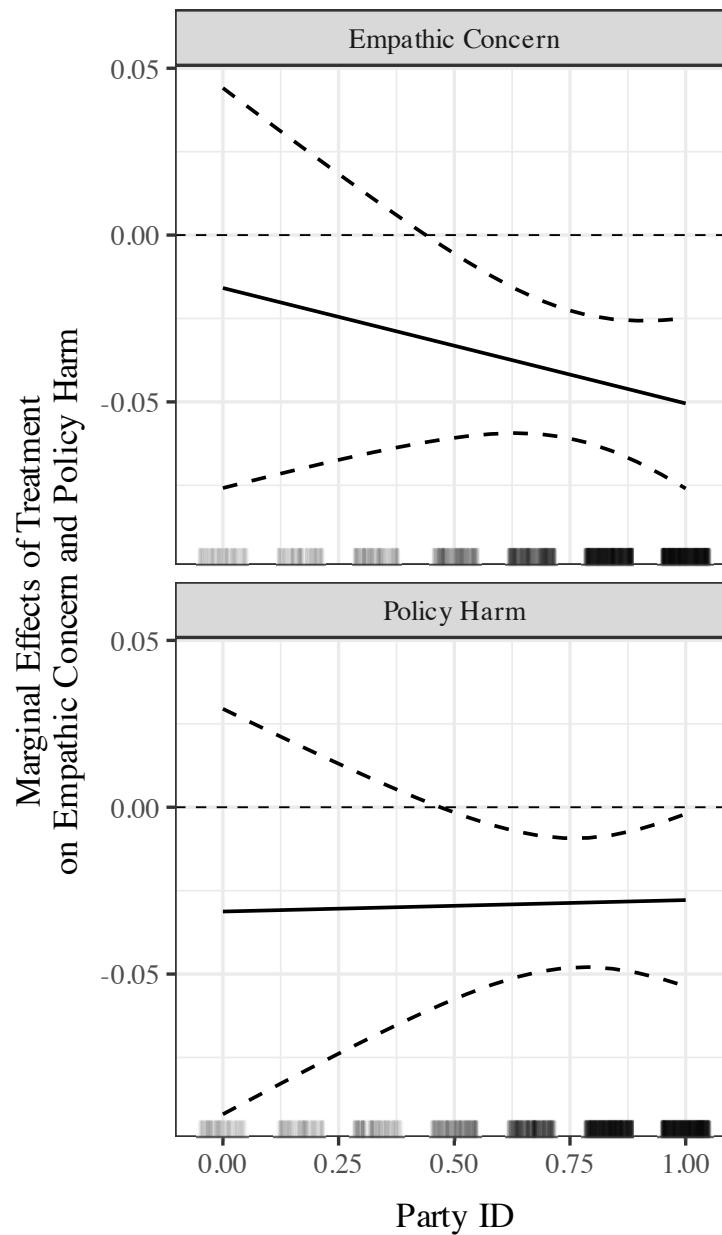
Figure H.11: Figure showing the marginal effects of the treatments on empathic concern and policy harm, by Party ID, for Study 2. Rug plot of Party ID included; bars represent 95% confidence intervals.

H.4 Study 2 Results with 3-Item Antipathy Measure

This section provides results from study 2 with a 3-item antipathy measure and compares them to the original 9-item measure in Tables H.21, H.22, and H.23. Results are almost identical with either measure.

Table H.21: Regression of Empathic Concern on Pre-Treatment Antipathy and Treatments, Study 2, 3- vs. 9-Item Antipathy Measure

	3-Item	9-Item
Intercept	0.69***	0.69***
	(0.01)	(0.01)
Illegal Condition	−0.02†	−0.02*
	(0.01)	(0.01)
Outgroup Antipathy	−0.14***	−0.14***
	(0.01)	(0.01)
Illegal Condition × Antipathy	−0.05*	−0.05**
	(0.02)	(0.02)
N	1977	1977
R^2	0.15	0.16
adj. R^2	0.14	0.16
Resid. sd	0.20	0.20

Standard errors in parentheses
† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

Table H.22: Regression of Dissonance on Pre-Treatment Antipathy and Treatments, Study 2, 3- vs. 9-Item Antipathy Measure

	3-Item	9-Item
Intercept	0.25***	0.24***
	(0.01)	(0.01)
Illegal Condition	0.02†	0.02†
	(0.01)	(0.01)
Outgroup Antipathy	0.03*	0.05***
	(0.01)	(0.01)
Illegal Condition × Antipathy	0.04*	0.05*
	(0.02)	(0.02)
N	1982	1982
R^2	0.03	0.04
adj. R^2	0.02	0.04
Resid. sd	0.22	0.22

Standard errors in parentheses
† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

Table H.23: Regression of Policy Harm on Pre-Treatment Antipathy and Treatments, Study 2, 3- vs. 9-Item Antipathy Measure

	3-Item	9-Item
Intercept	0.52***	0.52***
	(0.01)	(0.01)
Illegal Condition	−0.04***	−0.03**
	(0.01)	(0.01)
Outgroup Antipathy	0.24***	0.25***
	(0.01)	(0.01)
Illegal Condition × Antipathy	0.02	0.02
	(0.02)	(0.02)
N	1982	1982
R^2	0.27	0.30
adj. R^2	0.27	0.30
Resid. sd	0.20	0.19

Standard errors in parentheses

[†] significant at $p < .10$; [*] $p < .05$; [**] $p < .01$; [***] $p < .001$

H.5 Results for Separate Policy Outcomes

This section breaks down our "Changing Minds about Policy" results by the different policy components of the outcome measure in Tables H.24 and H.25.

Table H.24: Regression of Separate Policy Outcomes on Antipathy and Treatments, Study 1

	Law (English)	Law (Tuition)	Law (Welfare)	Law (Hire)	Imm. Opinion	AZ Law	State Bill Harm
Intercept	0.58***	0.56***	0.62***	0.57***	0.37***	0.53***	0.78***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Humanization	−0.00	−0.04†	−0.00	0.01	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
Information	−0.01	0.02	0.02	0.04*	0.04*	0.05*	0.03*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
Combined	−0.03	−0.01	0.02	0.01	0.01	0.01	0.03†
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
Outgroup Antipathy	0.27***	0.32***	0.26***	0.26***	0.28***	0.34***	0.16***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
Antipathy × Humanization	−0.02	−0.01	−0.01	0.00	−0.02	−0.00	−0.01
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
Antipathy × Information	0.00	−0.02	−0.06*	−0.03	−0.04	−0.04	−0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
Antipathy × Combined	0.01	−0.02	−0.05†	−0.01	−0.03	−0.02	−0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
N	3477	3476	3477	3476	3409	3478	3474
R^2	0.18	0.23	0.15	0.17	0.20	0.27	0.12
adj. R^2	0.18	0.23	0.15	0.17	0.20	0.27	0.12
Resid. sd	0.29	0.28	0.27	0.27	0.26	0.27	0.20

Standard errors in parentheses
† significant at $p < .10$; $^*p < .05$; $^{**}p < .01$; $^{***}p < .001$

Table H.25: Regression of Separate Policy Outcomes on Antipathy and Treatments, Study 2

	Law (English)	Law (Tuition)	Law (Welfare)	Law (Hire)	Imm. Opinion	Aid Illegal	Take Resources	Deny Rights
Intercept	0.39***	0.48***	0.55***	0.48***	0.38***	0.74***	0.39***	0.33***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Illegal	−0.02	−0.02	−0.03†	−0.04**	−0.05**	−0.04**	−0.05***	−0.01
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Antipathy	0.21***	0.22***	0.16***	0.19***	0.28***	0.16***	0.27***	0.27***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Illegal × Antipathy	0.03	−0.01	0.04†	0.03	0.02	0.03	0.03	−0.03
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)
N	1981	1981	1982	1981	1972	1977	1978	1977
R^2	0.15	0.14	0.12	0.16	0.20	0.13	0.26	0.19
adj. R^2	0.15	0.14	0.12	0.16	0.20	0.13	0.26	0.19
Resid. sd	0.26	0.25	0.23	0.23	0.28	0.23	0.24	0.25

Standard errors in parentheses
† significant at $p < .10$; $^*p < .05$; $^{**}p < .01$; $^{***}p < .001$

H.6   Results Using Common Policy Outcomes

This section replicates the "Changing Minds about Policy" results while only using the five survey questions contained in both surveys. As can be seen in Tables H.26 and H.27, the results are almost identical.

Table H.26: Regression of Policy Harm on Antipathy and Treatments, Study 1, Common Items vs. Full Scale

	Common Policy Items	Full Policy Scale
Intercept	0.54***	0.57***
	(0.01)	(0.01)
Humanization	−0.01	−0.00
	(0.01)	(0.01)
Information	0.02	0.03*
	(0.01)	(0.01)
Combined	0.00	0.01
	(0.01)	(0.01)
Outgroup Antipathy	0.28***	0.27***
	(0.01)	(0.01)
Humanization × Antipathy	−0.01	−0.01
	(0.02)	(0.02)
Information × Antipathy	−0.03†	−0.03†
	(0.02)	(0.02)
Combined × Antipathy	−0.02	−0.02
	(0.02)	(0.02)
N	3481	3482
R^2	0.31	0.33
adj. R^2	0.31	0.33
Resid. sd	0.20	0.18

Standard errors in parentheses
† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table H.27: Regression of Policy Harm on Antipathy and Treatments, Study 2, Common Items vs. Full Scale

	Common Policy Items	Full Policy Scale
Intercept	0.53***	0.52***
	(0.01)	(0.01)
Illegal Condition	−0.03**	−0.03**
	(0.01)	(0.01)
Outgroup Antipathy	0.23***	0.25***
	(0.01)	(0.01)
Illegal Condition × Antipathy	0.02	0.02
	(0.02)	(0.02)
N	1982	1982
R^2	0.25	0.30
adj. R^2	0.25	0.30
Resid. sd	0.21	0.19

Standard errors in parentheses
† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

H.7 Relationship between Empathic Concern and Support for Harmful Policies

Figures H.12 and H.13 show the correlation between empathic concern and support for harmful policies in studies 1 and 2, respectively. Note the strong negative correlation across treatments and across low vs. high antipathy, with the exception of the control condition in study 1.
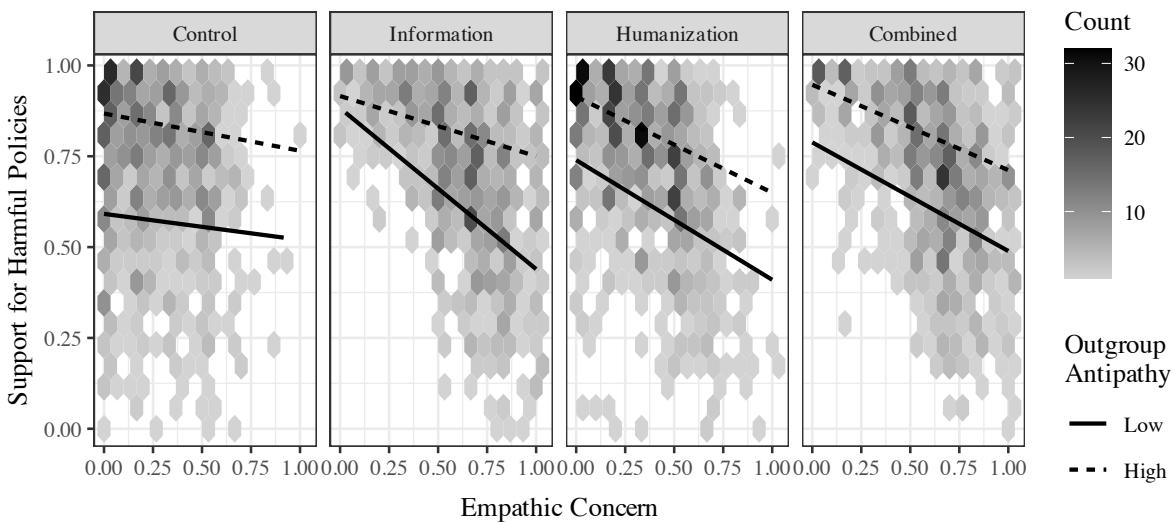

Figure H.12: Relationship between post-treatment empathic concern and post-treatment support for harmful policies, with regression lines, study 1.
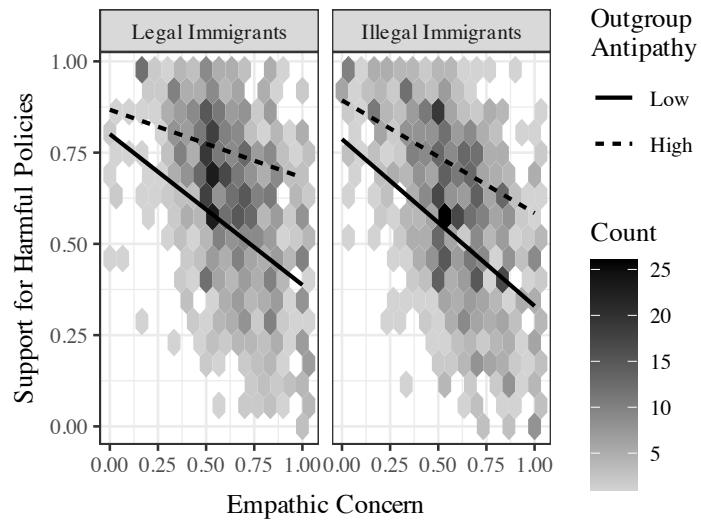
Figure H.13: Relationship between post-treatment empathic concern and post-treatment support for harmful policies, with regression lines, study 2.

H.8   Linearity and Binning of Marginal Effects

The results of our analyses are very reliant on the presence of heterogeneous treatment effects. For the sake of simplicity in interpretation, we usually opt to present these heterogeneous by binning participants into low and high antipathy groups in the paper. However, recent research (Hainmueller et al. 2019) indicates that estimates from multiplicative interaction models like ours can, at times, be highly dependent on binning choices. For this reason, we use the `interflex` package in `R` to examine what our main marginal effects would look like with a kernel estimate, two bins (the analysis used in the paper), and three bins. As seen in Figures H.14, H.15, and H.16, the moderating effect of outgroup antipathy is highly linear in nature and the choice of number of bins has little effect on the substantive conclusions drawn from our analyses.
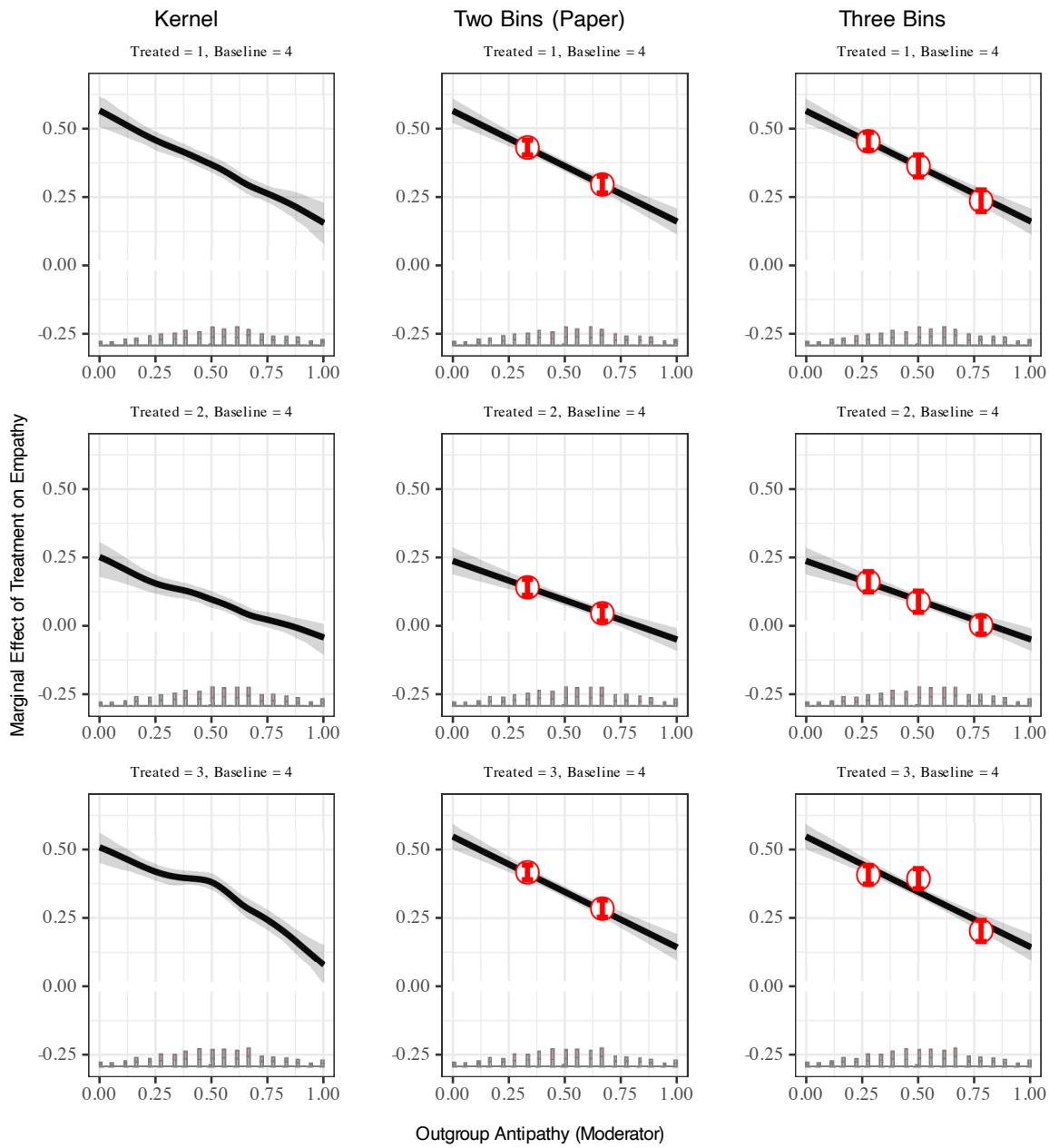
Figure H.14: Marginal effects on empathic concern from study 1, kernel estimates and tests with two and three bins
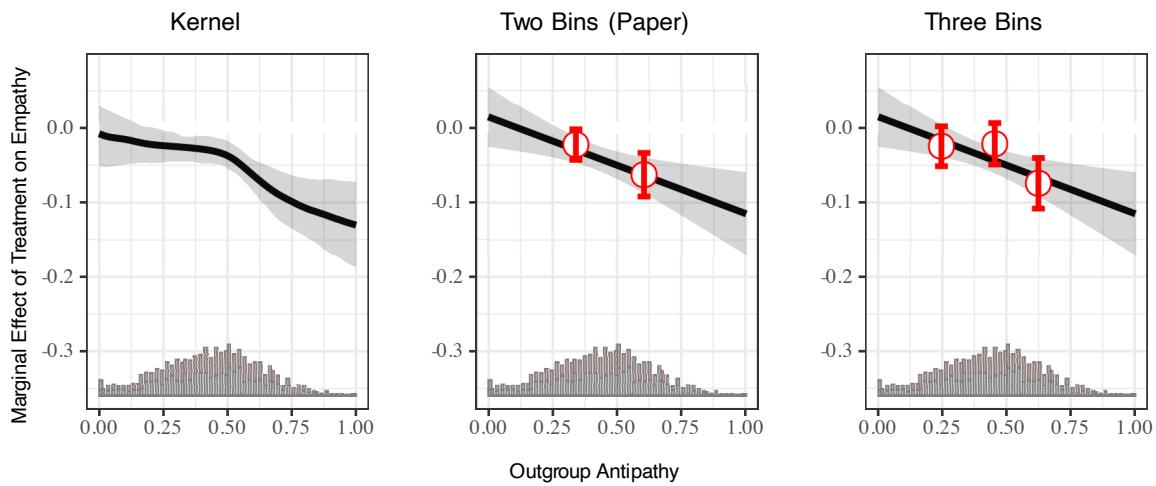
Figure H.15: Marginal effects on empathic concern from study 2, kernel estimates and tests with two and three bins
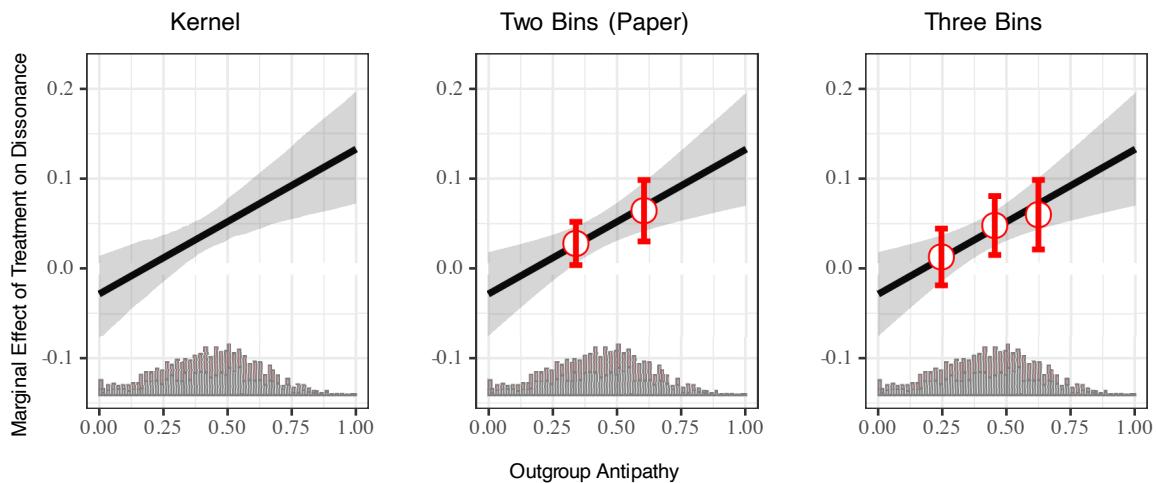

Figure H.16: Marginal effects on dissonance from study 2, kernel estimates and tests with two and three bins