

Online Appendix:

Countering Misperceptions to Reduce Prejudice: An Experiment on Attitudes toward Muslim Americans

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Abstract

Muslim Americans constitute one of the United States' most vulnerable minority groups, facing frequent discrimination from both the public and the government. Despite this vulnerability, few studies evaluate interventions for reducing prejudice against Muslim Americans. Building from an insightful literature on the sources of prejudice against Muslim Americans, this paper tests whether attitudes can be improved with information countering misperceptions of the community as particularly foreign, threatening, and disloyal to the United States. The experimental treatment modestly improved attitudes, including among some subgroups predisposed to prejudice against Muslim Americans. However, the treatment struggled to change policy views, and it demonstrated some vulnerability to social desirability bias and priming on terrorism threats. The findings suggest that information campaigns addressing misperceptions can help to reduce prejudice on the margins, but primarily in less politicized contexts.

Keywords: prejudice reduction; Muslim Americans; experiments; American politics

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1 Prejudice Against Muslim Americans

Negative attitudes toward Muslim Americans have remained stubbornly high for decades in the United States (GhaneaBassiri 2013; Kalkan et al. 2009; Panagopoulos 2006). The problem worsened in the immediate aftermath of the September 11 attacks, when hate crimes against Muslim Americans spiked by a magnitude of 1,700 percent (Human Rights Watch 2002), and the ongoing War on Terror continued to fuel Islamophobia over the next decade (Haddad and Harb 2014). Visceral prejudice became even more visible in the context of the 2016 presidential election. Donald Trump made attacks against Muslims a central plank of his campaign (Calfano et al. 2017), and hate crimes targeting Muslims increased dramatically in 2015 and 2016 (Pitter 2017), with the number of assaults even outpacing the period following the September 11 attacks (Kishi 2017). Muslim Americans are more likely than members of any other religion to experience discrimination regularly (Mogahed and Pervez 2016), and the American public reports lower favorability ratings for Muslims than any other religious group, with attitudes similar to those toward atheists (Pew 2017a). While some Muslim Americans have responded to this discrimination by withdrawing from the political system or their American identity (Hobbs and Lajevardi 2019; Saleem et al. 2018; Saleem and Ramasubramanian 2017), many others have been galvanized to participate actively in pushing for greater recognition and protection of their communities (Barreto and Bozonelos 2009; Dana et al. 2011; Jamal 2005).

A large and productive scholarly literature has diagnosed the roots of this prejudice, which appear to stem significantly from misperceptions that define Muslims as “enemy Others” (Jamal 2008). On the one hand, Muslims in the United States are viewed by many Americans as a foreign minority that falls outside of the country’s cultural mainstream, insofar as most Muslim Americans are foreign-born and the religion is perceived as different from the dominant Judeo-Christian tradition (Huntington 2004; Kalkan et al. 2009; Panagopoulos 2006). At the same time, attitudes toward Muslims are closely tied to fears about terrorism, particularly following the September 11 attacks and subsequent War on Terror. Muslims are stereotyped as violent and threatening (Conrad et al. 2017; Hellwig and Sinno 2016; Jamal 2010; Khan and Ecklund 2012; Morey and Yaqing 2011; Piazza 2015; Saleem and Anderson 2013; Saleem et al. 2015; Sides and Gross 2013), and their loyalty to the United States is often questioned (Braman and Sinno 2009; Haddad and Harb 2014; Jamal 2008; Panagopoulos 2006). In 2013, for instance, more than 40 percent of Americans claimed that Muslim Americans were less patriotic than their fellow citizens (YouGov 2013). Such attitudes have also penetrated US law enforcement agencies, which have often treated Muslims as disloyal and the community as a security threat (Akram 2002; Howell and Jamal 2009).

These views of Muslims as foreign, threatening, and disloyal do not reflect accurate perceptions of the Muslim American community – in particular, they overstate differences between Muslim Americans and the general American public. While Muslim Americans are very much an immigrant community—nearly 60 percent were

born overseas—they are well integrated, and their norms and demographic characteristics reflect those of other Americans. Muslim Americans have similar levels of education and income as other Americans, they are just as likely to be married, and nearly ninety percent believe they have “a lot” or “some” in common with most Americans (Pew 2017b). Regardless of their religiosity, overwhelming majorities of Muslim Americans are proud of their American identity and believe in the “American Dream” that hard work can bring success in the United States; in addition, they are equally as likely as other Americans to reject violence against civilians and to express concerns about extremism in the name of Islam (Acevedo and Chaudhary 2015; Dana et al. 2017; Mogahed and Pervez 2016; Pew 2017). Consistent with these concerns, the community has also played a crucial role in assisting US law enforcement agencies to counter violent extremism in the United States, even while experiencing discrimination from these same agencies (Adida et al. 2017; Beutel 2015; Jamal 2008). For instance, the NYPD spied extensively on Muslim American communities and often conflated typical markers of piety with extremism (Kalin and Lajevardi 2017). More broadly, it can be argued that countering violent extremism (CVE) programs unfairly impose a collective burden on the Muslim American community (Aziz 2016).

These misperceptions of Muslim Americans have been fueled by the media and political environments in the United States. Even before the September 11 attacks, news coverage often connected Muslims to violent conflicts and security threats (Akram 2002; Esposito 1999; Sheikh et al. 1996). Unsurprisingly, such trends have only continued: terrorist attacks perpetrated by Muslims are more likely to receive news coverage in the first place (Kearns et al. 2019), and they are also more likely to be portrayed as reflective of an organized and severe threat (Powell 2011). US media also tends to portray Muslims as inherently sexist (Terman 2017). Extremist political entrepreneurs on the right have increasingly sought to deepen these concerns, promoting conspiracy theories about sharia law and the disloyalty of Muslims in the United States (Duss et al. 2015; Haddad and Harb 2014).

At the same time, these information flows exist in an environment where a majority of Americans say they know little about Islam as a religion, and where just over half report knowing a single Muslim (Pew 2017a; Pew 2010). This lack of familiarity suggests an opportunity for attitudes to change as awareness of similarities between Muslim Americans and the mainstream increases. In fact, Americans appear to have become more favorable toward Muslims as a result of the 2016 presidential election, during which the community received significant attention in the press due to attacks by Trump’s campaign (Telhami 2017). The public also became increasingly opposed to President Trump’s “Muslim Ban” once exposed to new information about how the ban contradicted fundamental American principles (Collingwood et al. 2018).

Despite the extent of prejudice against Muslim Americans, the community has been largely overlooked by studies testing interventions to reduce prejudice. For instance, a comprehensive literature review by Paluck and Green (2009), which includes approximately 1,000 studies, shows none focused on Muslim Americans. This absence has generally persisted since, with only a few exceptions. Saleem et al.

(2015a) demonstrate that negative media portrayals of Muslims as aggressive and threatening intensify negative attitudes, while positive coverage can produce more positive attitudes. In addition, Saleem et al. (2015b) implement an intervention based on attachment theory to reduce prejudice against Muslim Americans. On the other hand, Calfano et al. (2016) find no statistically significant effects from a survey experiment in which respondents are exposed to a short treatment with positive information about Muslim Americans.

References

- Acevedo, Gabriel A. and Ali R. Chaudhary. 2015. Religion, Cultural Clash, and Muslim American Attitudes about Politically Motivated Violence. *Journal for the Scientific Study of Religion* 54(2): 242-260.
- Akram, Susan M. 2002. The Aftermath of September 11, 2001: The Targeting of Arabs and Muslims in America. *Arab Studies Quarterly* 24(2-3): 61-118.
- Adida, Claire L., David D. Laitin, and Marie-AnneValfort. 2017. The Wrong Way to Stop Terrorism. *Foreign Affairs*. February 1.
- Aziz, Sahar. 2016. Countering violent extremism programs are not the solution to Orlando mass shooting. *Brookings Institution*. June 29.
- Barreto, Matt A. & Bozonelos, Dino N. 2009. Democrat, Republican, or None of the Above? The Role of Religiosity in Muslim American Party Identification. *Politics and Religion* 2(2): 200-229.
- Beutel, Alejandro J. 2015. Community-led approaches to countering violent extremism in the United States. *Brookings Institution*. May 30.
- Calfano, Brian R., Nazita Lajevardi, and Melissa R. Michelson. 2017. Trumped up challenges: limitations, opportunities, and the future of political research on Muslim Americans. *Politics, Groups, and Identities* 7(2): 477-487.
- Calfano, Brian R., Paul A. Djupe, Daniel Cox, and Robert Jones. 2016. Muslim Mistrust: The Resilience of Negative Public Attitudes after Complimentary Information. *Journal of Media and Religion* 15(1): 29-42.
- Collingwood, Loren, Nazita Lajevardi and Kassra A.R. Oskooii. 2018. A Change of Heart: Why Individual-Level Public Opinion Shifted against Trump's Muslim Ban. *Political Behavior* 40(4): 1035-1072.
- Conrad, Courtenay R., Sarah E. Croco, Brad T. Gomez, and Will H. Moore. 2017. Threat Perception and American Support for Torture. *Political Behavior* 40(5): 989-1009.

- Dana, Karam, Bryan Wilcox-Archuleta, and Matt Berreto. 2017. The Political Incorporation of Muslims in the United States: The Mobilizing Role of Religiosity in Islam. *The Journal of Race, Ethnicity, and Politics* 2(2): 170-200.
- Dana, Karam, Matt A. Barreto, and Kassra A.R. Oskooii. 2011. Mosques as American Institutions: Mosque Attendance, Religiosity, and Integration into the Political System among American Muslims. *Religions* 2(4): 504-524.
- Duss, Matthew, Yasmine Taeb, Ken Gude, and Ken Sofer. 2015. Fear, Inc. 2.0: The Islamophobia Network's Efforts to Manufacture Hate in America. *Center for American Progress*. February 11.
- Esposito, John. 1999. *The Islamic Threat: Myth or Reality?*. Oxford University Press.
- GhaneaBassiri, Kambiz. 2013. Islamophobia and American History. In *Islamophobia in America*. Ed. Carl W. Ernst. Palgrave Macmillan.
- Haddad, Yvonne Y. and Nazir Nader Harb. 2014. Post-9-11: Making Islam an American Religion. *Religions* 5(2): 477-501.
- Hellwig, Timothy and Abdulkader Sinno. 2016. Different groups, different threats: public attitudes toward immigrants. *Journal of Ethnic and Migration Studies*. 43(3): 339-358.
- Hobbs, William and Nazita Lejevardi. 2019. Effects of Divisive Political Campaigns on the Day-to-Day Segregation of Arab and Muslim Americans. *American Political Science Review*. 113(1): 270-276.
- Howell, Sally and Amaney Jamal. 2009. The Aftermath of the 9/11 Attacks among Arab Americans: Detroit Exceptionalism and the Limits of Political Incorporation. In *Citizenship and Crisis: Arab Detroit after 9/11*. Eds: W. Baker, S. Howell, A. Lin, A. Shryock, R. Stockton, and M. Tessler. Russell Sage Foundation.
- Huntington, Samuel P. 2004. *Who Are We? The Challenges to America's National Identity*. Simon and Schuster.
- Jamal, Amaney. 2008. Civil Liberties and the Otherization of Arab and Muslim Americans. In *Race and Arab Americans Before and After 9/11*. Eds: Amaney Jamal and Nadine Naber. Syracuse University Press.
- Jamal, Amaney. 2005. The Political Participation and Engagement of Muslim Americans. *American Politics Research* 33(4), 521-544.
- Kalin, Michael and Nazita Lajevardi. 2017. Breathing While Muslim in the Age of Trump. *Political Violence a Glance*. January 17.

- Kalkan, Kerem O., Geoffrey C. Layman, and Eric M. Uslaner. 2009. "Bands of Others?" Attitudes toward Muslims in Contemporary American Society. *Journal of Politics* 71(2): 1-16.
- Khan, Mussarat and Kathryn Ecklund. 2012. Attitudes Toward Muslim Americans Post-9/11. *Journal of Muslim Mental Health* 7(1): 1-16.
- Kishi, Katayoun. 2017. Assaults against Muslims in U.S. surpass 2001 level. *Pew Research Center*. November 15.
- Kearns, Erin M., Allison E. Betus, and Anthony F. Lemieux. 2019. Why Do Some Terrorist Attacks Receive More Media Attention Than Others? *Justice Quarterly*.
- Lajevardi, Nazita and Kassra A.R. Oskooii. 2018. Old-Fashioned Racism, Contemporary Islamophobia, and the Isolation of Muslim Americans in the Age of Trump. *Journal of Race, Ethnicity, and Politics* 3(1): 112-152.
- Mogahed, Dalia and Fouad Pervez. 2016. American Muslim Poll: Participation, Priorities, and facing Prejudice in the 2016 Elections. *Institute for Social Policy and Understanding*.
- Morey, Peter and Amina Yaqin. 2011. *Framing Muslims: Stereotyping and Representation After 9/11*. Harvard University Press.
- Panagopoulos, Costas. 2006. The Polls-Trends: Arab and Muslim Americans and Islam in the Aftermath of 9/11. *Public Opinion Quarterly* 70(4): 608-624.
- Pew Research Center. 2017a. Americans Express Increasingly Warm Feelings Toward Religious Groups. February 15.
- Pew Research Center. 2017b. U.S. Muslims Concerned About Their Place in Society, but Continue to Believe in the American Dream. July 26.
- Pew Research Center. 2010. Public Remains Conflicted Over Islam. August 24.
- Piazza, James A. 2015. Terrorist Suspect Religious Identity and Public Support for Harsh Interrogation and Detention Practices. *Political Psychology* 36(6): 667-690.
- Pitter, Laura. 2017. Hate Crimes Against Muslims in US Continue to Rise in 2016. *Human Rights Watch*. May 11.
- Powell, Kimberley A. 2011. Framing Islam: An Analysis of U.S. Media Coverage of Terrorism Since 9/11. *Communication Studies* 62(1): 90-112.

- Saleem, Muniba, Eric Dubow, Fiona Lee, and Rowell Huesmann. 2018. Perceived Discrimination and Intergroup Behaviors: The Role of Muslim and American Identity Integration. *Journal of Cross-Cultural Psychology* 49(4): 602-617.
- Saleem, Muniba and Srividya Ramasubramanian. 2017. Muslim Americans' Responses to Social Identity Threats: Effects of Media Representations and Experiences of Discrimination. *Media Psychology*.
- Saleem, Muniba, Sara Prot, Craig A. Anderson, Anthoony F. Lemieux. 2015a. Exposure to Muslims in Media and Support for Public Policies Harming Muslims. *Communication Research* 44(6): 841-869.
- Saleem, Muniba, Sara Prot, Mina Cikara, Ben C.P. Lam, Craig A. Anderson, and Margareta Jelic. 2015b. Cutting Gordian Knots: Reducing Prejudice Through Attachment Security. *Personality and Social Psychology Bulletin* 4(11): 1560-1574.
- Saleem, Muniba and Craig A. Anderson. 2013. Arabs as terrorists: Effects of stereotypes within violent contexts on attitudes, perceptions, and affect. *Psychology of Violence* 3(1): 84-99.
- Sheikh, Kashif Z., Vincent Price, and Hayg Oshagan. 1996. Press Treatment of Islam: What Kind of Picture Do the Media Paint? *International Communication Gazette* 56(2): 139-154.
- Sides, John and Kimberly Gross. 2013. Stereotypes of Muslims and Support for the War on Terror. *Journal of Politics* 75(3): 583-598.
- Telhami, Shibley. 2017. How Trump changed Americans' views of Islam—for the better. *The Washington Post Monkey Cage*. January 25.
- Terman, Rochelle. 2017. Islamophobia and Media Portrayals of Muslim Women: A Computational Text Analysis of US News Coverage. *International Studies Quarterly* 61(3): 489-502.
- YouGov. 2013. "44% Question Muslim American Patriotism." April 25.

2 Sample Composition

Sixty-three percent of the sample was (non-Hispanic) white, compared to sixty-two percent of the national population. Forty-eight percent was male, compared to forty-nine percent in the national population. Thirty-nine percent had completed at least some college, compared to thirty-nine percent in the national population. These national estimates are from the Census Bureau (2017). Thirty-six percent of respondents identified as Democrats, twenty-six percent as Republicans, and thirty-seven

percent as independents or non-partisans. This compares to Pew findings from 2017 in which thirty-three percent identified as Democrats, twenty-six percent identified as Republicans, and thirty-seven percent identified as independents. The median age in the sample was 45.

3 Survey Instrument

Terrorism Prime (viewed by half of respondents): Following the rise of ISIS and terrorist attacks in Paris, Orlando, and San Bernardino, terrorism has often been in the news in recent years. In your opinion, how threatening is terrorism to the United States?

- Very threatening
- Somewhat threatening
- A little threatening
- Not at all threatening

Information Treatment (viewed by two-thirds of respondents): Most Americans say they do not know any Muslims. To help address this unfamiliarity, two research centers (ISPU and the Pew Research Center) have compiled information comparing Muslim Americans to other Americans. Some of this information is shown below. (Salient Prejudice Treatment (viewed by half of respondents who receive the information treatment, or one-third of all respondents): If you have misperceptions about Muslim Americans, you could be contributing to prejudice against this vulnerable minority group.) Does any of the information here surprise you? Please check the boxes that you find surprising.

- Muslim Americans have the same hobbies as other Americans: 48 percent of Muslim Americans watch pro or college sports regularly, compared to 47 percent of the general American public.
- Muslim Americans oppose violence against civilians as much as other Americans: 81 percent of Muslim Americans say violence against civilians is never justified, compared to 84 percent of Protestant Americans.
- Muslim Americans value their American identity as much as other Americans: 85 percent of Muslim Americans say that being an American is very or somewhat important to their identity, compared to 84 percent of Protestant Americans.
- None of the above.

Outcome Questions

How do you feel about Muslims in the United States? A score between 50 to 100 means that you feel favorably toward them, while a score between 0 to 50 means that you feel unfavorably. You would choose 50 if you do not feel favorably or unfavorably. There is no right or wrong answer. (Non-Political Correctness Prime (viewed by half of respondents): People have different opinions about Muslim Americans, so you should not feel like you need to be politically correct.) Please be as honest as possible.

- Feeling thermometer (Scale = 0 to 100)

Compared to other Americans, do you think that Muslim Americans are:

- More patriotic
- About as patriotic
- Less patriotic

Recently, some politicians have called for the following policies. Do you support or oppose these policies? (Increasing surveillance of Muslim Americans; Banning all refugees from Muslim countries; Requiring Muslims to register with the US government.)

- Strongly Support
- Support
- Oppose
- Strongly Oppose

Demographic Questions

Do you know any Muslims in the United States?

- Yes
- No

Generally speaking, do you consider yourself a...?

- Democrat
- Republican
- Independent
- Other (Please Specify)

Not Sure

What year were you born?

Write-in

Are you male or female

Male

Female

What racial or ethnic group best describes you?

White

Black or African American

Hispanic or Latino

Asian or Asian-American

Native American

Middle Eastern

Mixed Race

Other (Please Specify)

What is the highest level of education you have completed?

Did not graduate from high school

High school graduate

Some college, but no degree (yet)

2-year college degree

4-year college degree

Postgraduate degree (MA, MBA, MD, JD, PhD, etc.)

In general, how would you describe your own political viewpoint?

Very Liberal

Liberal

Moderate

- Conservative
- Very Conservative
- Not Sure

Some people seem to follow what's going on in government and public affairs most of the time, whether there's an election going on or not. Others aren't that interested. Would you say you follow what's going on in government and public affairs...?

- Most of the time
- Some of the time
- Only now and then
- Hardly at all
- Don't know

4 Outcome Measures

4.1 Summary Statistics for Outcomes

Table 1: Summary Statistics

Variable	Obs.	Min-Max	Mean	SD
PCA Component	3,227	-3.76 - 2.56	0	1.77
Thermometer	3252	0 - 100	62.69	27.82
Patriotism	3256	0 - 1	0.66	0.47
Surveillance	3241	1 - 4	2.67	1.01
Refugee Ban	3240	1 - 4	2.88	1.07
Registration	3236	1 - 4	2.51	1.16

Higher policy values correspond to opposition.

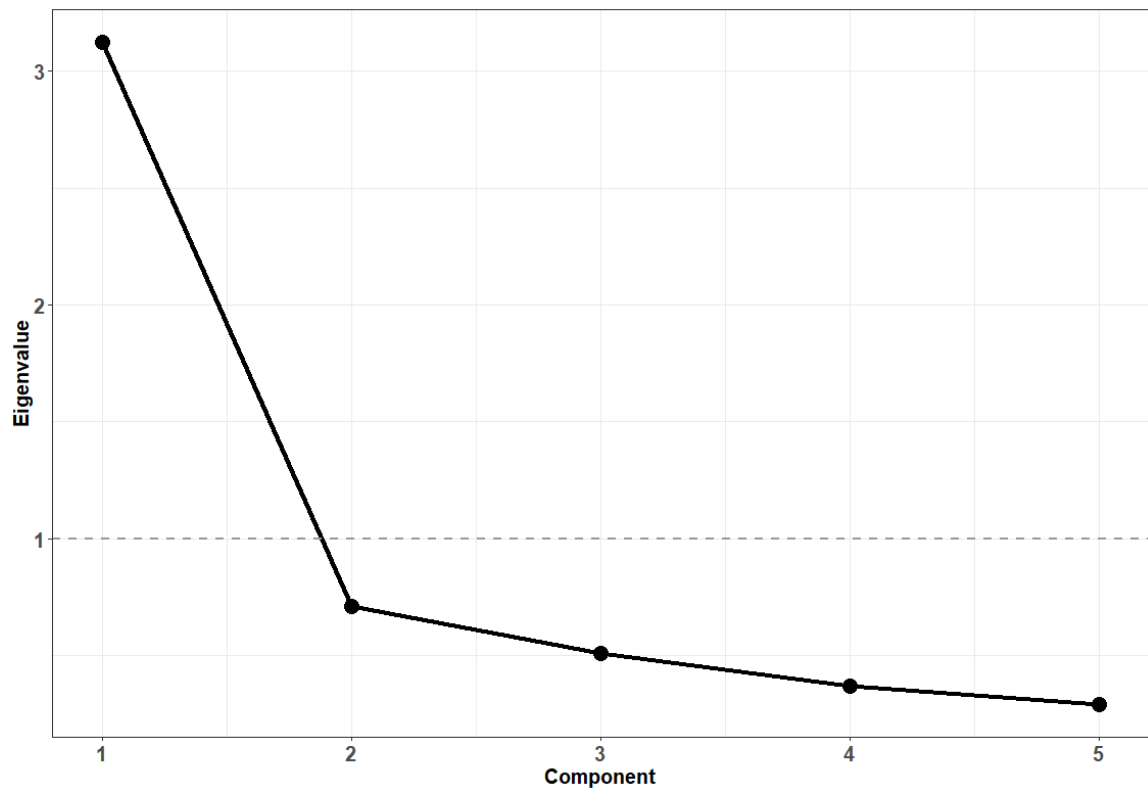
4.2 Principal Components Analysis

Principal components analysis was performed using the five outcome variables: the feeling thermometer, patriotism question, and three policy positions. As shown in Table 2 and the Scree Plot in Figure 1, the first component accounts for 62.3 percent of the variance – more than 4 times higher than the next component.

Table 2: Results of PCA

Component	Eigenvalue	Difference	Proportion
1	3.122	2.412	0.623
2	0.710	0.202	0.142
3	0.508	0.140	0.102
4	0.368	0.075	0.074
5	0.293	–	0.059

Figure 1: Scree Plot



5 Random Assignment

Randomization for the three manipulations (treatment, terrorism prime, non-PC license) were independent of each other. Each respondent had a two-thirds probability of being assigned to the treatment, a one-half probability of being assigned to the terrorism prime, and a one-half probability of being assigned to the non-PC license. In terms of survey order, respondents either viewed the terrorism prime or not, they then viewed the treatment or not, and they then viewed the non-PC license or not as part of the instructions for the feeling thermometer, which was the first outcome question. The distribution of respondents across the different groups is shown below.

Table 3: Information Treatment

Group	Total
Information Treatment (2/3)	n = 2,183
Control (1/3)	n = 1,084
Total	n = 3,267

Table 4: Information Treatment and Terrorism Prime

Group	Terrorism Prime (1/2)	No Terrorism Prime (1/2)	Total
Information Treatment (2/3)	n = 1087	n = 1096	n = 2,183
Control (1/3)	n = 534	n = 550	n = 1,084
Total	n = 1,621	n = 1,646	n = 3,267

Table 5: Information Treatment and Non-PC License

Group	Non-PC License (1/2)	No License (1/2)	Total
Information (2/3)	n = 1092	n = 1091	n = 2,183
Control (1/3)	n = 554	n = 530	n = 1,084
Total	n = 1,621	n = 1,646	n = 3,267

Table 6: Information Treatment, Terrorism Prime, and Non-PC License

Group	Prime, License	Prime, No License	No Prime, License	No Prime, No License	Total
Information (2/3)	n = 531	n = 556	n = 561	n = 535	n = 2,183
Control (1/3)	n = 276	n = 258	n = 278	n = 272	n = 1,084
Total	n = 807	n = 814	n = 839	n = 807	n = 3,286

6 Balance

Table 7: Balance for Information Treatment

Logistic Regression

Variable	Coefficient
Age	-0.004 (0.002)
Male	-0.039 (0.078)
White	0.042 (0.097)
Education	0.014 (0.030)
News Interest	-0.014 (0.039)
Conservative	-0.053 (0.098)
Republican	0.033 (0.102)
Terrorism	0.034 (0.076)
Not Know Muslims	-0.056 (0.079)
Constant	0.813 (0.187)***
Observations	3166
Prob > χ^2	0.834

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10

Dependent variable is assignment to information treatment.

Table 8: Balance for Information Treatment

Variable	Mean (Treatment)	Mean (Control)	SD (Treatment)	SD (Control)	t-stat
Age	44.70	45.72	17.70	17.35	1.55
Male	0.48	0.49	0.50	0.50	0.42
White	0.65	0.65	0.49	0.49	0.03
Education	3.31	3.27	1.54	1.53	0.63
News Interest	2.09	2.11	1.07	1.06	0.38
Conservative	0.29	0.30	0.45	0.46	0.76
Republican	0.26	0.27	0.44	0.44	0.11
Terrorism	0.50	0.49	0.50	0.50	0.28
Not Know Muslims	0.54	0.56	0.50	0.50	1.11

Table 9: Balance for Terrorism Prime

Logistic Regression

Variable	Coefficient
Age	0.002 (0.002)
Male	-0.002 (0.073)
White	-0.051 (0.073)
Education	-0.023 (0.028)
News Interest	-0.030 (0.037)
Conservative	-0.085 (0.093)
Republican	0.090 (0.096)
Information	0.034 (0.076)
Not Know Muslims	0.085 (0.074)
Constant	0.009 (0.173)
Observations	3166
Prob > χ^2	0.830

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10

Dependent variable is assignment to terrorism treatment.

Table 10: Balance for Terrorism Prime

Variable	Mean (Treatment)	Mean (Control)	SD (Treatment)	SD (Control)	t-stat
Age	45.25	44.84	17.76	17.19	0.65
Male	0.48	0.48	0.50	0.50	0.21
White	0.64	0.64	0.48	0.48	0.35
Education	3.28	3.32	1.52	1.55	0.70
News Interest	2.08	2.11	1.07	1.06	0.64
Conservative	0.29	0.29	0.45	0.46	0.26
Republican	0.27	0.26	0.44	0.44	0.65
Information	0.67	0.67	0.47	0.47	0.29
Not Know Muslims	0.56	0.54	0.50	0.50	1.24

Table 11: Balance for Non-PC License

Logistic Regression

Variable	Coefficient
Information	-0.031 (0.076)
Age	-0.002 (0.002)
Male	-0.111 (0.073)
White	-0.041 (0.092)
Education	0.023 (0.028)
News Interest	-0.006 (0.038)
Conservative	0.067 (0.093)
Republican	-0.027 (0.096)
Terrorism	-0.031 (0.071)
Not Know Muslims	0.099 (0.074)
Constant	0.119 (0.183)
Observations	3,166
Prob > χ^2	0.742

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10

Dependent variable is assignment to terrorism treatment.

Table 12: Balance for Non-PC License

Variable	Mean (Treatment)	Mean (Control)	SD (Treatment)	SD (Control)	t-stat
Age	44.70	45.39	0.43	0.44	1.10
Male	0.47	0.49	0.50	0.50	1.51
White	0.65	0.61	0.48	0.49	2.16
Education	3.31	3.29	1.51	1.56	0.38
News Interest	2.09	2.10	1.07	1.06	0.15
Conservative	0.30	0.29	0.45	0.46	0.34
Republican	0.26	0.27	0.44	0.44	0.25
Information	0.66	0.67	0.47	0.47	0.58
Terrorism	0.49	0.50	0.50	0.50	0.70
Not Know Muslims	0.54	0.56	0.50	0.50	1.51

7 Results for Main Effects

Table 13: T-Tests for Main Effects

Outcome	Mean (Treatment)	Mean (Control)	SD (Treatment)	SD (Control)	t-stat
PCA Component	0.079	-0.158	1.729	1.830	3.600***
Thermometer	64.426	59.209	26.881	29.331	5.045***
Patriotism	0.679	0.632	0.467	0.482	2.662**
Surveillance	2.712	2.581	1.002	1.028	3.472***
Muslim Ban	2.893	2.848	1.061	1.092	1.138
Registration	2.535	2.466	1.158	1.161	1.604

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10

Table 14: Regression Results for Main Effects

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.237 (0.067)***	5.206 (1.063)***	0.047 (0.018)**	0.131 (0.038)***	0.045 (0.040)	0.069 (0.043)
Constant	-0.158 (0.056)***	59.209 (0.892)***	0.632 (0.015)***	2.581 (0.031)***	2.848 (0.033)***	2.466 (0.035)***
Observations	3227	3252	3256	3241	3240	3236

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

8 Robustness of Main Effects

The following robustness checks were performed: dropping speeders; including covariates, and assessing consistency of the results across the different SSI surveys.

8.1 Speeders Included

Table 15: Main Effects with Speeders

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.240 (0.063)***	4.893 (1.004)***	0.042 (0.017)*	0.136 (0.036)***	0.049 (0.039)	0.083 (0.041)*
Constant	-0.160 (0.052)	58.851 (0.839)***	0.649 (0.014)***	2.537 (0.030)***	2.793 (0.032)***	2.428 (0.033)***
Observations	3,550	3580	3587	3569	3569	3562

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

8.2 Covariates Included

As with other models in which covariates were included, they are: age, white, male, education, news interest, conservative ideology, republican party ID, terrorism prime, and whether or not the respondent knows any Muslims in the United States.

Table 16: Main Effects with Covariates

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.221 (0.060)***	5.067 (0.989)***	0.043 (0.017)*	0.127 (0.036)***	0.037 (0.037)	0.061 (0.041)
Constant	0.870 (0.137)***	71.991 (2.348)***	0.744 (0.035)***	2.707 (0.088)***	3.237 (0.089)***	2.319 (0.102)***
Observations	3,147	3157	3203	3160	3159	3156

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

8.3 Individual SSI Surveys

The results from the individual SSI surveys, shown below, are consistent with the patterns that appear in the aggregated data. The treatment effect for the PCA component was significant in two of the three surveys, and it was significant for the feeling thermometer on all three surveys. The treatment effect was significant for the

patriotism outcome on one of the three surveys, but the effect size was similar on the other two surveys, so the imprecision here is likely due to sample size. Likewise, the treatment effect for the surveillance outcome was significant on one of the three surveys and marginally significant on the other two. Consistent with the aggregate data, the effects for the refugee ban and registration outcomes were insignificant for all three surveys.

Table 17: Main Effects - SSI Survey 1

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.136 (0.109)	4.460 (1.686)**	0.035 (0.029)	0.116 (0.062)†	-0.048 (0.066)	-0.009 (0.070)
Constant	-0.123 (0.090)	59.708 (1.398)***	0.650 (0.024)***	2.556 (0.051)***	2.878 (0.055)***	2.468 (0.057)***
Observations	1,221	1234	1235	1227	1226	1225

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

Table 18: Main Effects - SSI Survey 2

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.347 (0.124)**	6.726 (2.011)***	0.071 (0.032)*	0.162 (0.069)*	0.099 (0.074)	0.124 (0.078)
Constant	-0.207 (0.104)	58.165 (1.721)***	0.614 (0.027)***	2.579 (0.056)***	2.817 (0.062)***	2.482 (0.064)***
Observations	979	985	987	984	984	982

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

Table 19: Main Effects - SSI Survey 3

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.252 (0.118)*	4.647 (1.861)*	0.038 (0.032)	0.119 (0.068)†	0.106 (0.070)	0.111 (0.077)
Constant	-0.150 (0.098)	59.613 (1.554)***	0.628 (0.026)***	2.614 (0.056)***	2.841 (0.057)***	2.448 (0.063)***
Observations	1,027	1033	1034	1030	1030	1029

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

9 Heterogeneous Effects

9.1 Regression Results

Table 20: Heterogeneous Effects

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment x White Interaction						
Interaction	0.300 (0.122)*	4.006 (2.069)†	0.069 (0.035)*	0.153 (0.076)*	0.097 (0.077)	0.146 (0.087)†
Treatment	0.025 (0.094)	2.444 (1.672)	-0.003 (0.028)	0.026 (0.062)	-0.025 (0.061)	-0.035 (0.071)
White	-0.496 (0.110)***	-7.551 (1.849)***	-0.129 (0.031)***	-0.163 (0.067)*	-0.262 (0.068)***	-0.160 (0.077)*
Constant	0.976 (0.146)***	84.244 (2.431)***	0.854 (0.042)***	2.999 (0.094)***	3.469 (0.092)***	2.644 (0.109)***
Treatment x Elderly Interaction						
Interaction	0.382 (0.140)**	4.482 (2.210)*	0.076 (0.038)*	0.162 (0.079)*	0.147 (0.084)†	0.269 (0.094)**
Treatment	0.134 (0.069)†	4.045 (1.160)***	0.025 (0.020)	0.090 (0.042)*	0.006 (0.043)	-0.004 (0.048)
Elderly	-0.088 (0.118)	-1.916 (1.869)	-0.026 (0.032)	-0.015 (0.065)	-0.043 (0.070)	-0.002 (0.078)
Constant	0.736 (0.129)***	80.252 (2.099)***	0.794 (0.036)***	2.892 (0.079)***	3.305 (0.080)***	2.648 (0.092)***
Treatment x Republican Interaction						
Interaction	-0.161 (0.137)	0.041 (2.324)	-0.040 (0.040)	0.006 (0.079)	-0.103 (0.085)	-0.229 (0.091)*
Treatment	0.266 (0.070)***	5.080 (1.124)***	0.053 (0.019)**	0.125 (0.042)**	0.065 (0.043)	0.122 (0.049)*
Republican	-0.865 (0.122)***	-9.271 (2.058)***	-0.161 (0.035)***	-0.546 (0.070)***	-0.553 (0.075)***	-0.275 (0.080)***
Constant	0.815 (0.142)***	82.466 (2.313)***	0.782 (0.035)***	2.932 (0.088)***	3.407 (0.088)***	2.539 (0.103)***
Treatment x Does Not Know Muslims Interaction						
Interaction	0.069 (0.121)	0.324 (1.991)	0.000 (0.034)	0.012 (0.072)	0.052 (0.074)	0.067 (0.084)
Treatment	0.185 (0.090)*	4.911 (1.488)***	0.043 (0.024)†	0.120 (0.053)*	0.009 (0.054)	0.024 (0.064)
Does Not Know Muslims	-0.554 (0.104)***	-10.238 (1.713)***	-0.05 (0.028)†	-0.244 (0.060)***	-0.231 (0.063)***	-0.337 (0.064)***
Constant	0.870 (0.148)***	82.592 (2.441)***	0.823 (0.042)***	2.936 (0.091)***	3.446 (0.091)***	2.606 (0.108)***
Controls	✓	✓	✓	✓	✓	✓
Observations	3147	3157	3163	3160	3159	3156

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

9.2 Different Construction of Age Variables

The interaction between the treatment and age is robust to different constructions of the age variable. Here, I show the interaction with a continuous age variable, and with a dummy variable where elderly is defined as anyone 65 years or older (as opposed to 60 years or older in the paper).

Table 21: Heterogeneous Effects for Age Variables

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment x Age (Continuous) Interaction						
Interaction	0.012 (0.003)***	0.166 (0.055)**	0.003 (0.001)**	0.005 (0.002)**	0.004 (0.002)†	0.007 (0.002)**
Treatment	-0.317 (0.156)*	-2.439 (2.640)	-0.074 (0.044)†	-0.118 (0.098)	-0.134 (0.098)	-0.247 (0.115)*
Age	-0.011 (0.003)***	-0.182 (0.047)***	-0.003 (0.001)***	-0.005 (0.002)**	-0.006 (0.002)***	-0.003 (0.002)
Constant	1.201 (0.173)***	87.459 (2.849)***	0.900 (0.048)***	3.094 (0.107)***	3.540 (0.107)***	2.783 (0.127)***
Treatment x Elderly (65 or older) Interaction						
Interaction	0.480 (0.160)**	6.556 (2.496)**	0.115 (0.043)**	0.204 (0.088)*	0.164 (0.095)†	0.271 (0.105)**
Treatment	0.143 (0.066)*	4.000 (1.100)***	0.024 (0.019)	0.093 (0.039)*	0.014 (0.041)	0.014 (0.046)
Elderly	-0.105 (0.136)	-2.928 (2.128)	-0.037 (0.035)	-0.016 (0.073)	-0.029 (0.080)	0.016 (0.088)
Constant	0.738 (0.128)***	80.355 (2.067)***	0.795 (0.036)***	2.894 (0.079)***	3.301 (0.079)***	2.647 (0.092)***
Controls	✓	✓	✓	✓	✓	✓
Observations	3147	3157	3163	3160	3159	3156

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

Controls include: age, white, male, education, news interest, conservative ideology, republican party ID, terrorism prime, non-PC license, and whether or not the respondent knows any Muslims in the United States.

10 Terrorism Prime Results

Table 22: Main Effects of Terrorism Prime

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Terrorism Prime	-0.133 (0.062)*	-1.83 (0.975)†	0.01 (0.02)	-0.08 (0.036)*	-0.08 (0.038)*	-0.10 (0.041)*
Constant	0.066 (0.044)	63.60 (0.69)***	0.66 (0.012)***	2.71 (0.025)***	2.92 (0.026)***	2.56 (0.029)***
Observations	3227	3252	3256	3241	3240	3236

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

Table 23: Interaction with Terrorism Prime

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.300 (0.085)***	5.52 (1.50)***	0.063 (0.025)*	0.142 (0.053)**	0.093 (0.056)†	0.107 (0.061)†
Terrorism	-0.052 (0.112)	-1.45 (1.79)	0.027 (0.029)	-0.069 (0.063)	-0.017 (0.067)	-0.050 (0.071)
Interaction	-0.124 (0.134)	-0.61 (2.13)	-0.032 (0.036)	-0.022 (0.076)	-0.096 (0.081)	-0.074 (0.086)
Constant	-0.133 (0.078)	59.92 (1.26)***	0.619 (0.021)***	2.615 (0.044)***	2.856 (0.046)***	2.491 (0.049)***
Observations	3227	3252	3256	3241	3240	3236

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

Table 24: Information Treatment Effects with Terrorism Prime

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.18 (0.10)†	4.91 (1.50)***	0.03 (0.03)	0.12 (0.05)*	-0.00 (0.06)	0.03 (0.06)
Constant	-0.18 (0.08)*	58.48 (1.26)***	0.65 (0.02)	2.55 (0.05)***	2.84 (0.05)***	2.44 (0.05)***
Observations	1602	1617	1619	1610	1609	16307

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions
The sample is those individuals randomly assigned to the prime.

11 Political Correctness License

Table 25: Interaction with Political Correctness License

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.37 (0.10)***	6.83 (1.51)***	0.05 (0.03)†	0.19 (0.05)***	0.11 (0.06)†	0.18 (0.06)**
PC License	0.23 (0.11)*	1.87 (1.79)	0.03 (0.03)	0.11 (0.06)†	0.11 (0.07)	0.21 (0.07)**
Interaction	-0.25 (0.134)†	-3.20 (2.13)	0.00 (0.04)	-0.12 (0.08)	-0.13 (0.08)	-0.21 (0.09)*
Constant	-0.278 (1.28)***	58.25 (0.02)***	0.62 (0.12)***	2.52 (0.05)***	2.79 (0.05)***	2.36
Observations	3227	3252	3256	3241	3240	3236

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions

Table 26: Information Treatment Effects with Political Correctness License

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Treatment	0.11 (0.09)	3.63 (1.49)*	0.05 (0.02)*	0.07 (0.05)	-0.02 (0.06)	-0.03 (0.06)
Constant	-0.05 (0.08)	60.12 (1.25)	0.64 (0.02)	2.64 (0.04)	2.90 (0.05)	2.57 (0.05)
Observations	1632	1646	1644	1636	1636	1632

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors - OLS regressions
The sample is those individuals randomly assigned to the license.

12 Prejudice Prime Treatment

Half of respondents who received the information treatment were also randomly assigned an additional sentence informing them that their misperceptions could be contributing to prejudice against Muslim Americans. The idea was to test whether making the link to prejudice explicitly would produce differential effects of the information. The prejudice prime did uniformly result in a smaller treatment effect; however, the differences were not pronounced. Only for the feeling thermometer was there a statistically significant difference between the coefficients for the two treatment groups, and both sets of information still improved attitudes relative to the control at statistically significant levels.

Table 27: Main Effects - Prejudice Prime

OLS regressions

	PCA Component	Thermometer	Patriotism	Surveillance	Refugee Ban	Registration
Standard Treatment	0.283 (0.077)***	6.256 (1.208)***	0.056 (0.020)**	0.139 (0.044)**	0.076 (0.046)†	0.079 (0.050)
Prejudice Prime	0.192 (0.077)*	4.165 (1.210)***	0.038 (0.020)†	0.123 (0.044)**	0.015 (0.046)	0.059 (0.050)
Constant	-0.158 (0.056)**	59.209 (0.893)***	0.632 (0.015)***	2.581 (0.031)***	2.848 (0.033)***	2.466 (0.035)
Observations	3227	3252	3256	3241	3240	3236

*** p<0.001, ** p<0.01, * p<0.05 † p<0.10 - Robust Standard Errors

13 Compliance with Reporting Standards

Most of this information is reported in the paper or in the appendix above. I provide it here as well for additional clarity.

13.1 Hypotheses

The paper tests two hypotheses: first, that exposure to information countering misperceptions about Muslim Americans can improve attitudes toward this minority group; and second, that these effects may be stronger or weaker among subgroups predisposed to hold prejudiced attitudes.

13.2 Subjects and Context

Respondents were recruited by Survey Sampling International (SSI) from one of their online panels. The study was funded by the Lab for the Study of American Values, and the lab arranged for SSI to provide the data – as opposed to other firms – based on the needs of other researchers participating in the omnibus survey.

SSI find respondents online through various platforms to join its panels. It then randomly selects respondents for each survey to create a sample that is representative on important demographic characteristics. As discussed in Section 2 of this Appendix, the sample is representative for ethnicity, gender, education, and political party.

The three different surveys ran for the following dates: Survey 1 from March 23, 2017 until April 14, 2017; Survey 2 from March 22, 2017 until April 17, 2017; Survey 3 from March 22, 2017 until April 17, 2017.

458 speeders were dropped from the analysis. See Section 8.2 of this Appendix.

13.3 Allocation Method

The survey and all randomizations were conducted through Qualtrics.

Respondents were randomly assigned to an information treatment with two-thirds probability or a control condition with one-third probability. Respondents were also assigned with equal probability to a terrorism prime or not, and to a license to voice non-politically correct views or not.

There were no restrictions or blocking procedures. See Section 6 in this Appendix for evidence of random assignment.

13.4 Treatments

See Section 2.2 in the paper for the full text of the information treatment. See Section 3 of this Appendix for the full survey instrument, including exact language for the terrorism prime and non-PC license. In all three cases of randomization, the control group was defined by the absence of the language in the treatment group.

To ensure that respondents read the information closely in the information treatment, they were asked to mark those statements they found surprising. 42 percent of respondents selected at least one of the three statements.

13.5 Results

The information treatment takes a value of 1 for the two-thirds of respondents assigned to the treatment, and a value of 0 for the remaining respondents assigned to the control group. The terrorism prime takes a value of 1 for the half of respondents assigned to the prime, and a 0 for the remainder. The non-PC license takes a value of 1 for the half of respondents who read the license, and a 0 for those who did not. The outcome measures are described in detail in Section 2.3 of the paper. Outcomes were not preregistered, but results are reported for all outcome measures included in the survey.

In the subgroup analysis, control variables were included for: age, race, gender, education, news interest, conservative ideology, Republican party ID, and whether the respondents reported knowing any Muslims in the United States, in addition to the terrorism prime and non-PC license. The full text of the questions used to create these variables can be found in Section 3 of this Appendix. Age was used as a continuous variable, except when interacted with the treatment, where different binary measures for the elderly were used (see Section 3 of the paper and Section 9.2 of this Appendix for more details). For race, an indicator variable for white respondents was used in which whites were coded as 1. For gender, males were coded as 1. Education ranged from “did not graduate from high school” to “postgraduate degree” on a 6 point scale. News interest ranged from following political news “most of the time” to “don’t know” on a 5 point scale. The conservative variable was an indicator that took a value of 1 if respondents described their political point of view as “conservative” or “very conservative.” Republican party ID was an indicator for respondents who identified as Republicans. Respondents who said they personally knew Muslims in the United States were coded as 0, and those who said they did not were coded as 1.

The principal components analysis was conducted in Stata using the thermometer, patriotism, and three policy questions as inputs.

Analysis for main effects was conducted using t-tests to assess the significance of the difference of means for the treatment and control groups. Analysis for subgroup effects was done using OLS regression. There was no weighting used in the analysis.

13.6 Other Information

The study was approved by Stanford University IRB under protocol 40682. It was not preregistered. Funding was generously provided by the Lab for the Study of American Values, which was organized by Mike Tomz and Paul Sniderman. There were no restrictions on what could be studied or published. Replication data can be found at: <https://doi.org/10.7910/DVN/GKW5Q5>.