

## **Online Appendix A: Survey Details, Freedom and Tolerance Surveys**

All these surveys were conducted by SRBI (SRBI/Abt). In 2007, 2008, and 2009, we used a standard random digit dial (RDD) design; in 2010 and 2011, the RDD sample was supplemented with a cell-phone subsample.

### *2007 – 2009*

These surveys are based on a nationally representative RDD sample. Conducted by Schulman, Ronca, and Bucuvalas Inc. (SRBI), Computer-Assisted Telephone Interviewing was used. The initial questionnaires were subjected to a formal test, and, on the basis of the results of the pretests, were significantly revised. Within households, the respondents were selected randomly. The final data sets were subjected to some relatively minor post-stratification, and were also weighted to accommodate variability in the respondents' household sizes.

In 2007, the interviews averaged around 25 minutes in length. The AAPOR Cooperation Rate #3 was 43.8%, and the AAPOR Response Rate #3 was 29.5% (see AAPOR 2004), which is about the average of telephone surveys these days (Holbrook, Krosnick, & Pfent, 2007).

In 2008, the interviews averaged about 30 minutes in length. The AAPOR Cooperation Rate #3 was 43.6%, and the AAPOR Response Rate #3 was 30.5%.

In 2009, the interviews averaged around 37 minutes in length. The AAPOR Cooperation Rate #3 was 43.6%, and the AAPOR Response Rate #3 was 30.5%.

### *2010 – 2011*

The 2010 and 2011 surveys used a research design that combines a standard RDD subsample with a cell phone-only subsample. Samples were drawn from both the landline and cellphone national random digit dial (RDD) frames. Persons with residential landlines were not screened out of the cellphone sample. Both samples were provided by Survey Sampling International, LLC, according to SRBI/Abt specifications. Numbers for the landline sample were drawn with equal probabilities from active blocks (area code + exchange + two-digit block number) that contained one or more residential directory listings. The cell phone sample was drawn through a systematic sampling of 1,000 blocks dedicated to cellular service, according to the Telcordia database. For the landline portion of the sample, the respondents were selected randomly within household.

In 2010, the interviews averaged around 28 minutes in length. The overall AAPOR Cooperation Rate #3 was 47.6%, and the overall AAPOR Response Rate #3 was 30.9%. For the RDD stratum, the AAPOR Cooperation Rate #3 was 49.1%, and the overall AAPOR Response Rate #3 was 30.9%. The rates within the cell phone stratum were slightly lower: the AAPOR Cooperation Rate #3 was 41.6%, and the overall AAPOR Response Rate #3 was 26.6%. In 2011, the interviews averaged around 28 minutes in length. The overall AAPOR Cooperation Rate #3 was 43.7%, and the overall AAPOR Response Rate #3 was 29.6%. For the RDD stratum, the AAPOR Cooperation Rate #3 was 43.3%, and the overall AAPOR Response Rate #3 was 30.3%. The rates within the cellphone stratum were similar: The AAPOR Cooperation Rate #3 was 45.5%, and the overall AAPOR Response Rate #3 was 27.0%.

## **Online Appendix B: Question Wordings for Major Measures Used in the Analysis**

The constructs and the question wordings of their operationalizations are reported below.

### *Sociotropic Threat*

A scale is computed by summing the responses to each of the following items:

Here are some terms that can be used to describe various political groups. Taking them one at a time, please tell me how you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]. The first pair of terms is "not dangerous to society" versus "dangerous to society." On a scale of 0-10 where zero means "not dangerous to society" and 10 means "dangerous to society" and using any number in between, how do you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

The next pair of terms is "Dangerous to the normal lives of people" versus "Not dangerous to the normal lives of people." On a scale of 0-10 where zero means "Not dangerous to the normal lives of people" and 10 means "Dangerous to the normal lives of people" and using any number in between, how do you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

### *Egocentric Threat*

A scale is computed by summing the responses to each of the following items:

Let's suppose, for a minute, that [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP] came to power in the United States. Using the scale where "0" means the group would NOT reduce your personal political freedom at all, to "10"—the group would greatly reduce your personal political freedom—and using any number between zero and 10, where would you place [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

Considering your own personal security, using a scale where "0" means the group would NOT reduce your personal security at all and "10" means the group would greatly reduce your personal security and using any number between zero and 10, to what extent would [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP], if they gained power, affect your personal security?

### *Group Power*

A scale is computed by summing the responses to each of the following items:

On a scale of 0-10 where zero means "Unlikely to gain a lot of power in the United States" and 10 means "Likely to gain a lot of power in the United States" and using any number in between, how do you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

On a scale of 0-10 where zero means "Unlikely to affect how well my family and I live" and 10 means "Likely to affect how well my family and I live" and using any number in between, how do you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

On a scale of 0-10 where zero means "Not powerful" and 10 means "powerful" and using any number in between, how do you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

### *Perception that group is undemocratic*

On a scale of 0-10 where zero means "Not willing to follow the rules of democracy" and 10 means "Willing to follow the rules of democracy" and using any number in between, how do you feel about [GROUP X]?

### *Anger toward the group*

On a scale of 0-10 where zero means "Couldn't care less" and 10 means "Angry" and using any number in between, how do you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

### *Hatred toward the group*

On a scale of 0-10 where zero means "Couldn't care less" and 10 means "Hatred" and using any number in between, how do you feel about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

### *Fear toward the group*

To what degree do [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP] make you afraid versus not afraid? Using a scale where "0" means the group makes you NOT afraid and

“10” means the group makes you afraid and using any number between zero and 10, to what degree do you think [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP] make you afraid?

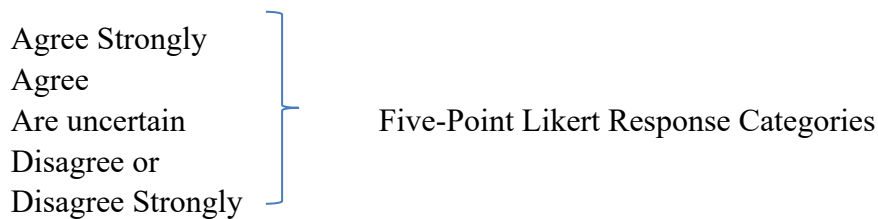
*Knows group member*

Do you personally know any [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP MEMBER], even one? Yes (1) / No (0)

*Liberty preferred to order*

A scale is computed by summing the responses to each of the following items:

Society shouldn't have to put up with those who have political ideas that are extremely different from the majority's.



It is better to live in an orderly society than to allow people so much freedom that they can become disruptive.

Five-Point Likert Response Categories

Free speech is just not worth it if it means that we have to put up with the danger to society of extremist political views.

Five-Point Likert Response Categories

*Support for the Rule of Law*

A scale is computed by summing the responses to each of the following items:

It is not necessary to obey a law you consider unjust.

Five-Point Likert Response Categories

Sometimes it might be better to ignore the law and solve problems immediately rather than wait for a legal solution.

Five-Point Likert Response Categories

The government should have some ability to bend the law in order to solve pressing social and political problems.

Five-Point Likert Response Categories

It is not necessary to obey the laws of a government that I did not vote for.

Five-Point Likert Response Categories

When it comes right down to it, law is not all that important; what's important is that our government solve society's problems and make us all better off.

Five-Point Likert Response Categories

### *Political Intolerance*

A scale is computed by summing the responses to each of the following items:

To what extent do you agree strongly, agree, are uncertain, disagree, or disagree strongly with the following statements about [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP]?

a. [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP] should be allowed to make a speech in our community. Do you...

Five-Point Likert Response Categories

b. [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP] should be banned from running for public office. Do you...

Five-Point Likert Response Categories

c. [LEAST-LIKED GROUP/OTHER HIGHLY DISLIKED GROUP] should be allowed to hold public rallies and demonstrations in our community. Do you...

Five-Point Likert Response Categories

*Dogmatism*

A scale is computed by summing the responses to each of the following items:

There are two kinds of people in this world: those who are for the truth and those who are against it.

Five-Point Likert Response Categories

To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

Five-Point Likert Response Categories

A group which tolerates too many differences of opinion among its own members cannot exist for long.

Five-Point Likert Response Categories

*Political Sophistication*

A political knowledge scale is computed by summing the correct responses to each of the following five items:

Item 1: Some judges in the U.S. are elected; others are appointed to the bench. Do you happen to know if the justices of the U.S. Supreme Court are elected or appointed to the bench?

- 1 Elected
- 2 Appointed to the Bench (Correct)

Some judges in the U.S. serve for a set number of years; others serve a life term. Do you happen to know whether the justices of the U.S. Supreme Court serve for a set number of years or whether they serve a life term?

- 1 Set Number of Years

- 2 Life Term (Correct)

Do you happen to know who has the last say when there is a conflict over the meaning of the Constitution—the U.S. Supreme Court, the U.S. Congress, or the President?

- 1 U.S. Supreme Court (Correct)
- 2 U.S. Congress
- 3 President

As you know, the U.S. Supreme Court issues written opinions along with its decisions in most major cases it decides. I wonder if you know about how many decisions with opinions the Court issues each year. Would you say it is ...

- 1 Less than one hundred decisions with opinions each year (Correct)
- 2 Around five hundred decisions with opinions
- 3 A thousand decisions with opinions or more per year

When the U.S. Supreme Court decides a case, would you say that...

- 1 The decision can be appealed to another court
- 2 Congress can review the decision to see if it should become the law of the land
- 3 The decision is final and cannot be further reviewed (Correct)



## Online Appendix C: Distributional Statistics

<b>Appendix C: Distributional Statistics for Major Variables in the Analysis</b>			
	Variables		
	Mean	Std. Dev.	Range
Group is most (versus 3 <sup>rd</sup> -most) disliked	.50	.50	0 → 1
Sociotropic Threat	.71	.29	0 → 1
Egocentric Threat	.69	.30	0 → 1
Group Power	.43	.27	0 → 1
Perception that group is undemocratic	.60	.34	0 → 1
Anger toward the group	.63	.34	0 → 1
Fear toward the group	.47	.37	0 → 1
Hatred toward the group	.51	.32	0 → 1
Knows group member	.17	.38	0 → 1
Liberty preferred to order	.60	.22	0 → 1
Support for the rule of law	.68	.17	0 → 1
Dogmatism	.48	.22	0 → 1
Political knowledge	.53	.33	0 → 1
Ideological identity (liberal = high)	.43	.28	0 → 1
Partisan identity (Democrat = high)	.55	.34	0 → 1
Religious attendance	.45	.28	0 → 1
Born-again	.37	.48	0 → 1
Female	.48	.50	0 → 1
Level of education	.51	.30	0 → 1

Owens home	.71	.46	0 → 1
Age	.36	.22	0 → 1
Black	.12	.33	0 → 1
Hispanic	.11	.32	0 → 1

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Note: N = 3,748.

## Online Appendix D: Combining Hatred and Anger in a Single Index

That the correlation of anger and hatred is .56 raises a question of whether these are in fact independent emotions. Some theoretical and empirical literature on emotion suggests that hatred and anger are manifestations of a single basic emotion. For example, cluster analyses of emotion lexicons usually group together hatred and anger (including other synonyms; e.g., Shaver, Schwartz, Kirson, and O'Connor 1987). And Ekman's classic studies of human facial expression indicate a list of six or seven basic emotions, including anger, distress, and disgust, but not hatred (e.g., Ekman 1972). More recently, Marcus, Neuman, and MacKuen (2017) have shown, using survey data on the American mass public, that "angry" and "hateful" load together on a single emotion factor (which they call "aversion").

However, there is also some evidence that hatred is distinct from anger, especially when it comes to emotion toward groups (Allport 1954; Mackie and Smith 2005). Indeed, hatred looms as a particularly prominent emotion in the study of intergroup conflict (Bar-Tal 2007; Peterson 2002; Staub 2005). Halperin (2008) provides evidence for the distinctiveness of hatred in the Israeli context. Most directly relevant to our paper, Halperin, Canetti-Nisim, and Hirsch-Hoefler (2009) strongly argue that intolerance is mainly rooted in intergroup hatred. Halperin, Russell, Dweck, and Gross (2011) join Halperin et al. in arguing that hatred differs from anger in its political consequences.

Therefore, scholarly opinion is not settled on the matter of whether hatred and anger are distinct when individuals are evaluating opposing groups, as they are, of course, when they form their tolerance judgments. Because we are especially interested in addressing the influential findings of Halperin, Canetti-Nisim, and Hirsch-Hoefler (2009) on the dominant role of hatred in fomenting intolerance, we present in the main body of the paper an analysis that treats anger, hatred, and fear as independent emotions.

However, because it not unreasonable to consider anger and hatred as multiple indicators of aversion, we have reproduced the analyses in our paper using an index of aversion that is simply the average of the responses on the hatred and anger variables. Tables 3A and 4A in this appendix report comparable analyses to the concomitant tables in the main body of our paper.

Table 3A reports findings quite similar to those we report in Table 3. In particular, we draw three conclusions. First, emotions are significantly related to intolerance, with more fear of the group and more aversion to the group being associated with greater intolerance. Second, the impact of the aversion (hatred/anger) variable is stronger than the impact of fear, and is significantly

stronger than the impact of these variables when they are treated as separate measures (although we do note that the predictive power of the two equations – one with the index, the other with the component variables – is virtually identical). Third, and germane to one of the main points of our paper, the influence of aversion is far from dominant, with predictors such as sociotropic threat, dogmatism, and sophistication, having the same or larger consequences for producing political intolerance.

The data in Table 4A address the second major contribution of our paper: whether the less sophisticated rely more on emotions in making their intolerance judgments. We test this hypothesis by interacting the two emotion variables with political sophistication.

In some respects, the results in Table 4A even more strongly support our conclusion that the influence of emotion does not vary by levels of political sophistication: neither of the interaction terms achieves statistical significance (and the magnitude of the coefficients is quite small). Recall that Table 4 discovered a significant interaction of sophistication with anger, but not with hatred (or fear). By putting anger and hatred together within a single variable, we have diluted the effects and obscured the relationships. However, given that our main concern is with the total effect of emotions on political intolerance, we are content with concluding from Table 4A that those more and less sophisticated do not differ significantly with regard to the influence of emotions on their political intolerance.

Thus, for our two most important theoretical/empirical contributions – emotions as a group are not dominant predictors of intolerance, and the unsophisticated do not rely more on their emotions – our choice on how we treat anger and hatred is entirely irrelevant. Both sets of analyses support the same conclusions.

## References

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**Table 3A. A Fully Specified Model of Political Intolerance**

Type of Predictor/Indicator	r	b	s.e.	$\beta$
Fear of the group	.16	.03**	.01	.04
Aversion (hatred/anger) toward the group	.23	.12***	.01	.13
Group is most (versus 3 <sup>rd</sup> -most) disliked	.13	.04***	.01	.06
Sociotropic threat	.26	.12***	.02	.12
Egocentric threat	.03	.03	.01	.03
Group power	.17	-.01	.02	-.01
Perception that group is undemocratic	.06	.04***	.01	.05
Knows group member	-.15	-.05***	.01	-.06
Order preferred to liberty	.37	.19***	.02	.15
Support for the rule of law	-.21	-.06*	.02	-.04
Dogmatism	.38	.22***	.02	.17
Political sophistication	-.37	-.17***	.01	-.20
Ideological identity (liberal = high)	-.10	-.02	.02	-.02
Partisan identity (Democrat = high)	.04	.02	.01	.02
Religious attendance	.09	.02	.01	.02
Born-again	.16	.01	.01	.02
Female	-.16	-.03***	.01	-.06
Level of education	-.30	-.10***	.01	-.11
Owens home	-.08	.02	.01	.03
Age	.03	.04*	.02	.03
Black	.11	.04***	.01	.05
Hispanic	.10	.04***	.01	.04
Group dummy variables		Yes		
Intercept		.24***	.03	

Standard Deviation – Dependent Variable	.28
Standard Error of Estimate	.21
R <sup>2</sup>	.42***
N	3,748
Notes: See Online Appendix C for information on the distributions of each of these variables.	
Unstandardized regression coefficients and R <sup>2</sup> :    *** $p < .001$ ** $p < .01$ * $p < .05$	

<b>Table 4A. The Moderating Effects of Emotions and Political Sophistication on Intolerance</b>			
Type of Predictor/Indicator	b	s.e.	$\beta$
Fear of the group	.00	.02	.00
Aversion (hatred/anger) toward the group	.14***	.02	.15
Political sophistication	-.17***	.03	-.20
Fear $\times$ Sophistication	.06	.03	.06
Aversion $\times$ Sophistication	-.05	.04	-.04
Intercept	.24***	.04	
Standard Deviation – Dependent Variable	.28		
Standard Error of Estimate	.21		
$R^2$	.42***		
$N$	3,748		

Notes:  
 These results are from supplementing the equation reported in Table 3 (above) with interaction terms for each of the three emotions interacted with political sophistication. The coefficients reported here pertain only to the emotions, political sophistication, and their interactions.

Unstandardized regression coefficients and  $R^2$ :    \*\*\*  $p < .001$     \*\*  $p < .01$     \*  $p < .05$