# Affect toward Transgender People, Political Awareness, and Support for Transgender 

## Rights

## Online Appendix

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## Appendix A1: Details of awareness measures

The political awareness indices are constructed from measures of factual political knowledge and self-reported interest in politics. Different items are included in each survey year, as below. For each, a lack of knowledge or interest is coded as 0 , and full knowledge or interest as 1 .

## 2016 ANES items

The index is constructed of 12 items:

- Knowledge of which party has a majority in the U.S. House
- Knowledge of which party has a majority in the U.S. Senate
- Knowledge of what job Vladimir Putin held
- Knowledge of what job Joe Biden held
- Knowledge of what job Paul Ryan held
- Knowledge of what job John Roberts held
- Knowledge of how long a Senate term lasts
- Correct identification of current unemployment rate, from a list
- Correct identification of which program the U.S. spends the least on, from a list
- How interested in politics respondent was
- How closely respondent follows politics on TV, radio, newspapers, or the Internet
- How often respondent follows information about government and politics

Cronbach's alpha for these items is 0.76 .

## 2020 ANES items

The index is constructed of 14 items:

- Knowledge of which party has a majority in the U.S. House
- Knowledge of which party has a majority in the U.S. Senate
- Knowledge of what job Vladimir Putin held
- Knowledge of what job Mike Pence held
- Knowledge of what job Nancy Pelosi held
- Knowledge of what job John Roberts held
- Knowledge of what job Angela Merkel held
- Knowledge of how long a Senate term lasts
- Correct ideological placement of Democratic Party to the left of Republican Party
- Correct identification of which program the U.S. spends the least on, from a list
- How interested in campaigns respondent was
- How often respondent pays attention to government and politics
- How interested in politics respondent was
- How closely respondent follows politics in media

Cronbach's alpha for these items is 0.78 .

The mean score on these items is taken for each respondent, and then their percentile rank within their survey year calculated. This percentile score is then divided by 100 , such that those with the lowest awareness in their survey year have a score of 0 , those with the greatest awareness a score of 1 .

## Appendix A2: Question wording and variable coding

Below we detail the question wording and coding of each attitudinal variable. Notes on the coding are italicized.

Bathroom access (2016 and 2020): Should transgender people -- that is, people who identify themselves as the sex or gender different from the one they were born as -- have to use the bathrooms of the gender they were born as, or should they be allowed to use the bathrooms of their identified gender? How strongly do you feel about that -- very strongly, moderately strongly, or slightly strongly? Coded from 0 (feel very strongly they should use bathrooms of the gender they were born as) to 1 (feel very strongly they should use bathrooms of their identified gender).

Military service (2020 only): Do you favor, oppose, or neither favor nor oppose allowing transgender people to serve in the United States Armed Forces? Do you [favor/oppose] that a great deal, a moderate amount, or a little? Coded from 0 (oppose a great deal) to 1 (favor a great deal).

Feeling thermometer (2016 and 2020): I'd like to get your feelings toward some of our political leaders and other people who are in the news these days. I'll read the name of a person and I'd like you to rate that person using something we call the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the person. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person and that you don't care too much for that person. You would rate the person at the 50 degree mark if you don't feel particularly warm or cold toward the person. If we come to a person whose name you
don't recognize, you don't need to rate that person. Just tell me and we'll move on to the next one. How would you rate: transgender people? Divided by 100, to range from 0 (coldest views) to 1 (warmest views).

Party identity (2016 and 2020): Generally speaking, do you usually think of yourself as a Democrat, a Republican, an Independent, or what? [IF DEMOCRAT/REPUBLICAN:] Would you call yourself a strong Democrat/Republican, or a not very strong Democrat/Republican? [IF INDEPENDENT:] Do you think of yourself as closer to the Republican Party or to the Democratic party? 7-point party ID scale recoded to range from 0 [Strong Democrat] to 1 [Strong Republican].

Authoritarianism (2016 and 2020): Although there are a number of qualities that people feel that children should have, every person thinks that some are more important than others. I am going to read you pairs of desirable qualities. Average of the following taken:

Please tell me which one you think is more important for a child to have: Independence or respect for elders? Coded as 0, 1, respectively.

Which one is more important for a child to have: Curiosity or good manners? Coded as 0, 1, respectively.

Which one is more important for a child to have: Obedience or self-reliance? Coded as 1,0 , respectively.

Which one is more important for a child to have: Being considerate or well behaved? Coded as 0, 1, respectively.

Egalitarianism (2016 and 2020): Average of four items:
"Our society should do whatever is necessary to make sure that everyone has an equal opportunity to succeed." Coded from 0 (strongly disagree) to 1 (strongly agree).
"This country would be better off if we worried less about how equal people are." Coded from 0 (strongly agree) to 1 (strongly disagree).
"It is not really that big a problem if some people have more of a chance in life than others" Coded from 0 (strongly agree) to 1 (strongly disagree).
"If people were treated more equally in this country we would have many fewer problems" Coded from 0 (strongly disagree) to 1 (strongly agree).

Transgender discrimination (2016 and 2020): For each of the following groups, how much discrimination is there in the United States today? Transgender people. Coded from 0 (None at all) to 1 (A great deal).

Gender role traditionalism (2016 only): Do you think it is better, worse, or makes no difference for the family as a whole if the man works outside the home and the woman takes care of the home and family? Is it much better [worse], somewhat better [worse], or slightly better [worse]? Coded from 0 (much worse) to 1 (much better).

Know transgender person (2020 only): Among your immediate family members, relatives, neighbors, co-workers, or close friends, are any of them transgender as far as you know? Coded as 0 (no); 1 (yes).

## Appendix A3: Descriptive statistics

Table A3.1: Summary statistics for 2016 and 2020 ANES data

|  | 2016 | 2020 |
| :--- | :---: | :---: |
|  | Mean (SD) | Mean (SD) |
| Support for transgender rights | $0.44(0.41)$ | $0.55(0.32)$ |
| Transgender feeling thermometer | $0.55(0.28)$ | $0.60(0.28)$ |
| Awareness | $0.50(0.28)$ | $0.46(0.29)$ |
| Party identity | $0.47(0.36)$ | $0.48(0.37)$ |
| Authoritarianism | $0.56(0.32)$ | $0.50(0.34)$ |
| Egalitarianism | $0.65(0.21)$ | $0.69(0.23)$ |
| Transgender discrimination | $0.69(0.28)$ | $0.68(0.28)$ |
| Religiosity | $0.50(0.43)$ | $0.54(0.37)$ |
| Age | $47(18)$ | $47(17)$ |
| Income | $2.98(1.43)$ | $3.11(1.38)$ |
| Education | $2.98(1.17)$ | $3.04(1.15)$ |
| Race |  |  |
| White | $70 \%$ | $66 \%$ |
| Asian | $3 \%$ | $4 \%$ |
| Black | $11 \%$ | $12 \%$ |
| Hispanic | $12 \%$ | $13 \%$ |
| Other race | $5 \%$ | $6 \%$ |
| Gender | $52 \%$ | $52 \%$ |
| Women | $48 \%$ | $48 \%$ |
| Men | $51 \%$ | $52 \%$ |
| Married | $49 \%$ | $48 \%$ |
| Yes |  |  |
| No |  |  |

Note: Weighted ANES data.

Table A3.2: Correlation matrix for 2016 data

|  | Support for transgender rights | Transgender feeling thermometer | Awareness | Party identity | Authoritarianism | Egalitarianism | Transgender discrimination | Religiosity | Income | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Support for transgender rights | 1.00 |  |  |  |  |  |  |  |  |  |
| Transgender feeling thermometer | 0.52 | 1.00 |  |  |  |  |  |  |  |  |
| Awareness | 0.1 | 0.11 | 1.00 |  |  |  |  |  |  |  |
| Party identity | -0.37 | -0.33 | 0.02 | 1.00 |  |  |  |  |  |  |
| Authoritarianism | -0.37 | -0.35 | -0.26 | 0.15 | 1.00 |  |  |  |  |  |
| Egalitarianism | 0.38 | 0.37 | 0.12 | -0.43 | -0.23 | 1.00 |  |  |  |  |
| Transgender discrimination | 0.28 | 0.25 | 0.04 | -0.32 | -0.18 | 0.36 | 1.00 |  |  |  |
| Religiosity | -0.34 | -0.31 | -0.04 | 0.21 | 0.31 | -0.12 | -0.15 | 1.00 |  |  |
| Income | 0.08 | 0.07 | 0.34 | 0.12 | -0.22 | -0.02 | 0.02 | -0.02 | 1.00 |  |
| Education | 0.17 | 0.16 | 0.38 | 0 | -0.34 | 0.09 | 0.05 | -0.04 | 0.4 | 1.00 |

Note: Weighted ANES data.

Table A3.3: Correlation matrix for 2020 data

|  | Support for <br> transgender <br> rights | Transgender <br> feeling <br> thermometer | Awareness | Party <br> identity | Authoritarianism | Egalitarianism | Transgender <br> discrimination | Religiosity | Income |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Education <br> Support for <br> transgender <br> rights | 1.00 |  |  |  |  |  |  |  |  |
| Transgender <br> feeling <br> thermometer | 0.64 | 1.00 |  |  |  |  |  |  |  |
| Awareness | 0.1 | -0.52 | -0.4 | -0.04 | 1.00 |  |  |  |  |
| Party identity |  |  |  |  |  |  |  |  |  |
| Authoritarianism | -0.41 | -0.32 | -0.3 | 0.21 | 1.00 |  |  |  |  |
| Egalitarianism | 0.48 | 0.39 | 0.11 | -0.54 | -0.26 |  |  |  |  |
| Transgender <br> discrimination | 0.45 | 0.37 | 0.08 | -0.43 | -0.22 | 1.00 |  |  |  |
| Religiosity | -0.37 | -0.29 | -0.05 | 0.23 | 0.37 |  |  |  |  |
| Income | 0.1 | 0.05 | 0.35 | 0.04 | -0.23 | -0.18 |  |  |  |
| Education | 0.21 | 0.15 | 0.4 | -0.09 | -0.32 | 0 |  |  |  |

## Note: Weighted ANES data.

## Appendix A4: Does awareness moderate the impact of religiosity?

As the models in Table 1 indicate, respondent religiosity has a sizable impact on attitudes toward transgender issues, consistent with other research. The more religious a respondent, the less likely they were to support transgender rights.

One remaining question is whether awareness moderates the impact of religiosity, as it does the impact of group affect. We might expect more politically aware respondents to see the connections between their religious attitudes and policy preferences, especially if more aware voters are more likely to receive cues from religious elites about the "right" positions to take on these issues.

To assess this, we replicated the models in Table 1, this time including an interaction term between awareness and religiosity, as shown in Table A4.1.

The results suggest that awareness does not have the moderating impact on religiosity as it does on group affect. In neither model is the interaction between religiosity and awareness discernible from zero. This is not to say that religiosity is unimportant in understanding attitudes on transgender rights. On the contrary, there is a substantial effect associated with it in both years. This effect does not, however, increase with awareness.

This suggests that religious respondents do not need to be particularly politically aware, or exposed to elite cues, in order to bring their religiosity to bear on transgender issues. Even among the least aware, support for transgender rights drops as religiosity increases.

Table A4.1: Regression models predicting support for transgender rights, with interaction between awareness and religiosity

|  | 2016 | 2020 |
| :--- | :---: | :---: |
| Intercept | $0.21(0.07)^{* * *}$ | $0.25(0.03)^{* * *}$ |
| Transgender feeling thermometer | $0.35(0.06)^{* * *}$ | $0.37(0.03)^{* * *}$ |
| Awareness | $-0.08(0.07)$ | $-0.05(0.04)$ |
| Awareness x feeling thermometer | $0.17(0.09)$ | $0.08(0.05)$ |
| Religiosity | $-0.09(0.04)^{*}$ | $-0.06(0.02)^{* *}$ |
| Awareness x religiosity | $-0.07(0.07)$ | $-0.04(0.04)$ |
| Party identity | $-0.18(0.03)^{* * *}$ | $-0.18(0.01)^{* * *}$ |
| Authoritarianism | $-0.14(0.03)^{* * *}$ | $-0.09(0.01)^{* * *}$ |
| Egalitarianism | $0.23(0.04)^{* * *}$ | $0.16(0.02)^{* * *}$ |
| Transgender discrimination | $0.07(0.03)^{*}$ | $0.13(0.02)^{* * *}$ |
| Gender role traditionalism | $-0.07(0.04)$ |  |
| Know transgender person |  |  |
| Asian | $0.02(0.04)$ | $-0.05(0.01)^{* * *}$ |
| Black | $-0.05(0.03)$ | $-0.08(0.01)^{* * *}$ |
| Hispanic | $-0.02(0.03)$ | $-0.01(0.01)$ |
| Other race | $-0.01(0.04)$ | $-0.02(0.02)$ |
| Age | $0.00(0.00)$ | $-0.00(0.00)$ |
| Women | $0.02(0.01)$ | $0.02(0.01)^{* *}$ |
| Married | $0.01(0.02)$ | $-0.02(0.01)^{*}$ |
| LGB | $0.19(0.03)^{* * *}$ | $0.06(0.01)^{* * *}$ |
| Income | $0.01(0.01)$ | $0.01(0.00)^{* *}$ |
| Education | $0.01(0.01)^{*}$ | $0.01(0.00)^{* * *}$ |
| N | 2,975 | 6,292 |
| Pseudo-R2 | 0.40 | 0.58 |
| $p<00$ |  |  |

${ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * * *} p<0.001$
Note: Linear regression models with weighted ANES data.

