

Appendices

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A Panel Information

A.1 Recruitment

Data was collected by Amerispeak/NORC at the University of Chicago. Using address-based probability sampling, interviews were conducted in either English or Spanish according to respondent preference. Respondents could choose to be interviewed online or by telephone. In total, 2,759 people participated in both the pre- and post- election waves of the panel.

A.2 Survey Dates

- Pre-election: October 6 - October 30, 2020
- Post-election: April 6 - May 17, 2021

A.3 Demographics

Table 3 shows demographics of respondents who participated in both waves of the panel, relative to demographics of the United States population. 12 % of respondents dropped after the first wave, so did not participate in the full panel. Table 4 shows demographics of the respondents who participated in both waves of the panel, relative to demographics of respondents who dropped after the first wave.

Table 3: Respondent Demographics Relative to Population Benchmarks

	Panel Respondents	US Population, Feb 2020
Income		
Less than \$30,000	19.9	17.5
\$30,000 to \$74,999	40.7	33.1
\$75,000 to \$124,999	24.4	24.6
More than \$125,000	15.0	24.9
Age		
18 - 34	17.5	29.3
35 - 49	26.7	24.3
50 - 64	28.9	24.9
65+	26.9	21.5
Race/Ethnicity		
Non-Hispanic White	73.1	62.8
Non-Hispanic Black	7.7	11.9
Hispanic	12.2	16.7
Non-Hispanic Asian/Pacific Islander	2.9	6.4
Non-Hispanic Others	4.1	2.2
Education Status		
Less than High School	2.5	9.8
High School or Equivalent	16.3	28.2
Some College/Associate Degree	38.0	27.7
Bachelor's Degree	24.1	21.8
Graduate Degree	19.2	21.4
Household Ownership		
Owner Occupied	70.2	67.5
Renter Occupied/Other	29.8	32.5
Children in Household		
With 1+ Under 18 Years	27.2	33.1
Without Children Under 18	72.8	66.9
Marital Status		
Currently Married	54.9	52.6
Separated/Divorced/Widowed/Single	45.1	47.4
Sex		
Male	49.2	48.3
Female	50.6	51.7

Note:

Percentages for panel respondents represent unweighted proportions of the respondents who participated in both waves of the panel. Population benchmark calculated based on Census Bureau Current Population Survey, February 2020. Percentages for each demographic may not sum to 100 due to rounding error.

Table 4: Panel Respondent Demographics Relative to Attrition Respondent Demographics

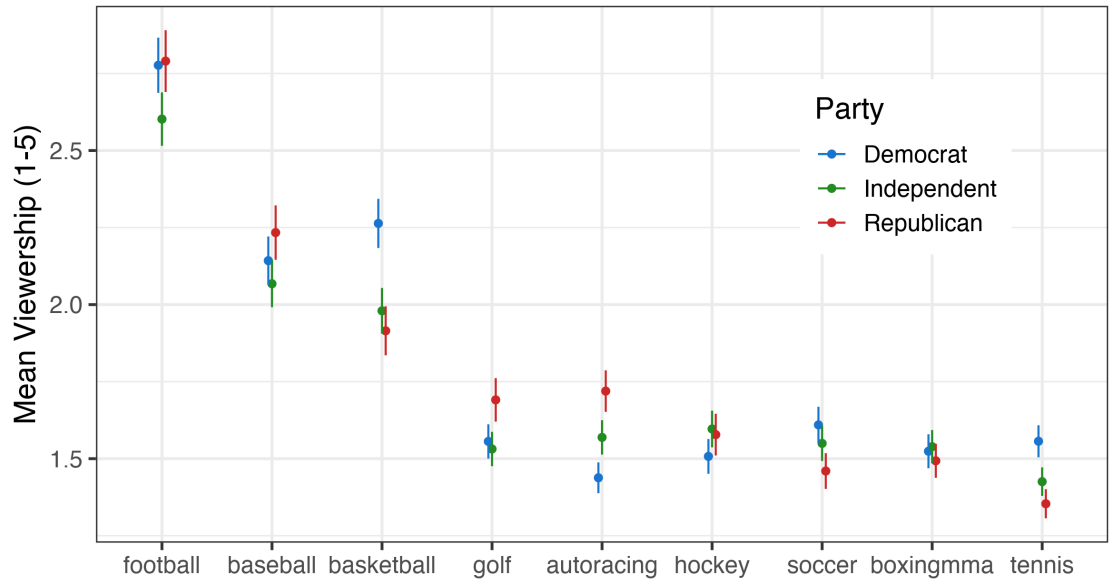
	Panel Respondents	Attrition
Income		
Less than \$30,000	19.9	33.7
\$30,000 to \$74,999	40.7	35.9
\$75,000 to \$124,999	24.4	18.9
More than \$125,000	15.0	11.5
Age		
18 - 34	17.5	28.2
35 - 49	26.7	24.7
50 - 64	28.9	23.3
65+	26.9	23.8
Race/Ethnicity		
Non-Hispanic White	73.1	55.6
Non-Hispanic Black	7.7	16.4
Hispanic	12.2	20.8
Non-Hispanic Asian/Pacific Islander	2.9	2.7
Non-Hispanic Others	4.1	4.4
Education Status		
Less than High School	2.5	6.6
High School or Equivalent	16.3	24.9
Some College/Associate Degree	38.0	39.5
Bachelor's Degree	24.1	16.7
Graduate Degree	19.2	12.3
Household Ownership		
Owner Occupied	70.2	53.7
Renter Occupied/Other	29.8	46.3
Children in Household		
With 1+ Under 18 Years	27.2	31.5
Without Children Under 18	72.8	68.5
Marital Status		
Currently Married	54.9	41.9
Separated/Divorced/Widowed/Single	45.1	58.1
Sex		
Male	49.2	45.5
Female	50.6	53.7

Note:

Percentages for attrition represent unweighted proportions of respondents who participated in the first wave of the panel but not the second. Percentages for panel respondents represent unweighted proportions of the respondents who participated in both waves of the panel. Percentages for each demographic may not sum to 100 due to rounding error.

A.4 Distribution of Sports Viewership

This figure shows the average level of sports viewership, split by sport and by respondent party identification (reported pre-election)



Error bars represent 95% confidence intervals

Figure 5: Sports Viewership by Sport and Party Identification

B Panel Question Wording

B.1 Candidate Preference

“If the presidential election were held today, which candidate would you vote for?”

- Donald Trump, the Republican
- Joe Biden, the Democrat
- Will not vote for President
- Other

I treat those who expressed they would vote for Biden as “winners” versus those who would vote for Trump as “losers”.

B.2 Perceived Election Legitimacy

Questions 1, 2, 3, and 5 were asked on a Likert of “[Very likely, Somewhat likely, Not too likely, Not at all likely]”. Question 4 was asked on a Likert of “[Very confident, Somewhat confident, Not too confident, Not at all confident]”. Brackets indicate differences between in question wording between the pre/post election waves. Question 4 was reverse coded so that higher values of the index represented greater confidence in the 2020 election process.

- In the [upcoming/] presidential election, how likely is it that some votes [will be/were] cast by people who were not eligible to vote?
- In the [upcoming/] presidential election, how likely is it that some people who [are/were] eligible to vote [will be/were] prevented from doing so?
- In the [upcoming/recent] presidential election, how likely is it that some people [will vote/voted] more than once?
- How confident are you that the votes across the country [will be/were] accurately counted?
- How likely is it that foreign interference [will affect/affected] the outcome of the US presidential election?

B.3 Watching Team Sports

“When each sport is in season, how frequently do you watch? [Several times a week or more, Once a week, A few times a month, Once or twice a year, Never]”

- Football
- Basketball
- Baseball
- Soccer
- Ice Hockey

C Testing Alternative Sets of Sports

In this section, I redo my panel analyses using different sets of sports. I replicate table 1, comparing the original set of team sports I use in Study 1 (football, baseball, basketball, hockey, soccer; $\alpha = .75$) to a set of “zero-sum sports” (football, baseball, basketball, hockey, soccer, tennis, boxing/mma; $\alpha = .78$) to a set of “all sports” (football, baseball, basketball, hockey, soccer, tennis, boxing/mma, auto racing, golf; $\alpha = .80$).

Table 5: Change in Perceived Election Legitimacy

	Team Sports	Zero-sum Sports	All Sports
Wave x Election Winner	0.393*** (0.014)	0.393*** (0.014)	0.393*** (0.014)
Wave x Election Loser	-0.313*** (0.018)	-0.312*** (0.018)	-0.315*** (0.018)
Wave x Election Winner x Sports Watching	-0.009 (0.014)	-0.009 (0.013)	-0.012 (0.013)
Wave x Election Loser x Sports Watching	0.061** (0.020)	0.062** (0.021)	0.065** (0.021)
N	2365	2365	2365

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models use within-person fixed effects

Table 5 replicates table 1, comparing the coefficients when operationalizing sports watching as watching team sports, zero-sum sports, or all sports. As the table illustrates, when using a more expansive set of sports the patterns of changes in perceptions of election legitimacy are very similar to the patterns when using team sports.

D Panel Models Including Additional Interactions

In this section, I test how the relationship between sports watching and changes in perceived election legitimacy among Trump supporters shifts when the influence of other time-invariant predictors is allowed to vary over time. I test three sets of variables: Television news, attitudes about race and status, and demographics correlated with watching sports.

D.1 Measures

D.1.1 Television News Consumption

In the post-election wave, I used a program-list measurement (Dilliplane, Goldman and Mutz 2013), asking people whether they watched 38 popular television news programs. I grouped these news programs into a set of categories based on the network they were broadcast on. Notably, there was one program on Newsmax, a network which became popular in the wake of the 2020 election due to its coverage claiming the election was stolen from Trump. All variables were measured post-election and interacted with the wave variable.

- **Fox News programs:** America's Newsroom with Bill Hemmer and Dana Perino, America Reports with John Roberts and Sandra Smith, The Five, Fox and Friends, Fox News at Night, Hannity, The Ingraham Angle, Justice with Judge Jeanine, Life Liberty & Levin, Outnumbered, Special Report with Brett Baier, The Story with Martha MacCallum, Tucker Carlson Tonight, Your World with Neil Cavuto
- **MSNBC News Programs:** The 11th Hour with Brian Williams, All In with Chris Hayes, The Beat with Ari Melber, Deadline: White House, The Last Word with Lawrence O'Donnell, The Rachel Maddow Show, The Reidout with Joy Reid
- **CNN News Programs:** Anderson Cooper 360, CNN Tonight with Don Lemon, Cuomo Prime Time, Erin Burnett Out Front, The Lead with Jake Tapper
- **Broadcast News Programs:** 60 Minutes, ABC World News Tonight with David Muir, CBS Evening News with Nora O'Donnell, CBS this Morning, Face the Nation, Good Morning America, Meet the Press, NBC Nightly News with Lester Holt, PBS NewsHour, The Today Show, The View
- **Newsmax Programs:** Greg Kelly Reports

D.1.2 Attitudes Related to Race and Status

I use five items related to perceptions of the amount of discrimination faced by certain groups:

"How much discrimination is there in the United States today against each of the following groups?"

- Blacks
- Hispanics
- Whites

- Men
- Christians

All items were measured on the following Likert scale: [A great deal, A lot, A moderate amount, A little, None at all]

The first and second items were combined into a belief in racial discrimination index (α .91) and the third through fifth items were combined into a status threat index (α .80). Both indexes were rescaled to have a mean of 0 and standard deviation of 1.

D.1.3 Demographics

I use the following demographics which are correlated with watching sports (Wann et al. 2001; *Morning Consult National Tracking Poll #210484* 2021-04-15/2021-04-19): Age, Sex, Race, Education, Income, and Religion. Age was measured in 7 bins, education in 4 bins (No high school, high school, some college, 4 years college and above). Income was measured in 18 bins, from less than \$5,000 per year to more than \$200,000 per year. Race was a binary white/nonwhite measure, as there were few non-white Trump supporters. Religion asked which of fourteen religions people identified with. I created binary indicators for the most popular religions: Protestant, Catholic, Other Christian, and Non-religious. All variables were measured pre-election and interacted with the wave variable. Age, education, and income were rescaled to have a mean of 0 and standard deviation of 1.

D.2 Results

The following table displays the complete models for all four sets of variables: The baseline model used in the paper, one incorporating media consumption, one incorporating attitudes related to race and status, and one incorporating demographics. For easier interpretation, the sample is restricted to those who expressed support for Trump in the pre-election wave. In other words, this shows how the reaction of election losers changed, depending on which other interactions are included in the model.

Table 6: Models Predicting Change in Perceived Election Legitimacy Among Trump Supporters

	Baseline	Including Media	Including Race/Status Attitudes	Including Demographics
Wave	-0.313 (0.018)	-0.298 (0.025)	-0.283 (0.108)	-0.436 (0.135)
Sports x Wave	0.061 (0.020)	0.056 (0.020)	0.062 (0.021)	0.037 (0.020)
Fox News x Wave		-0.011 (0.005)		
MSNBC x Wave		-0.006 (0.065)		
CNN x Wave		0.116 (0.039)		
Broadcast News x Wave		-0.001 (0.011)		
Newsmax x Wave		-0.067 (0.081)		
Status Threat x Wave			0.037 (0.020)	
Perceived Prejudice x Wave			-0.040 (0.023)	
Age x Wave				-0.144 (0.071)
Female x Wave				-0.195 (0.035)
Non-White x Wave				0.061 (0.059)
Education x Wave				0.189 (0.072)
Income x Wave				0.050 (0.081)
Protestant x Wave				0.127 (0.114)
Catholic x Wave				0.106 (0.117)
Other Christian x Wave				0.117 (0.117)
Non-Religious x Wave				0.198 (0.121)
Num.Obs.	979	979	974	979

D.3 Sensitivity to Unmeasured Omitted Variable Bias

To measure the sensitivity of my results to omitted variable bias for an unknown, unmeasured variable I use the approach of Cinelli and Hazlett (2020). This approach examines the amount of variance in both the DV of interest and the IV of interest which is explained by a variable. One then examines how much *more* variance would need to be explained by a hypothetical omitted variable to negate the relationship observed between the IV of interest and DV of interest. In my case, the variable that most strongly predicts the IV and DV of interest is the interaction between sex and the wave variable. I use that as the baseline to show how predictive an omitted variable would need to be, in terms of how much *more* predictive it would need to be than the most predictive variable I examine.

Outcome: Δ Perceived Election Legitimacy (Trump Supporters)						
Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D X}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$
<i>sports:wave</i>	0.037	0.019	1.923	0.4%	6%	0%
df = 968	Bound (1x wave:female): $R^2_{Y \sim Z X,D} = 3.3\%$, $R^2_{D \sim Z X} = 2.3\%$					

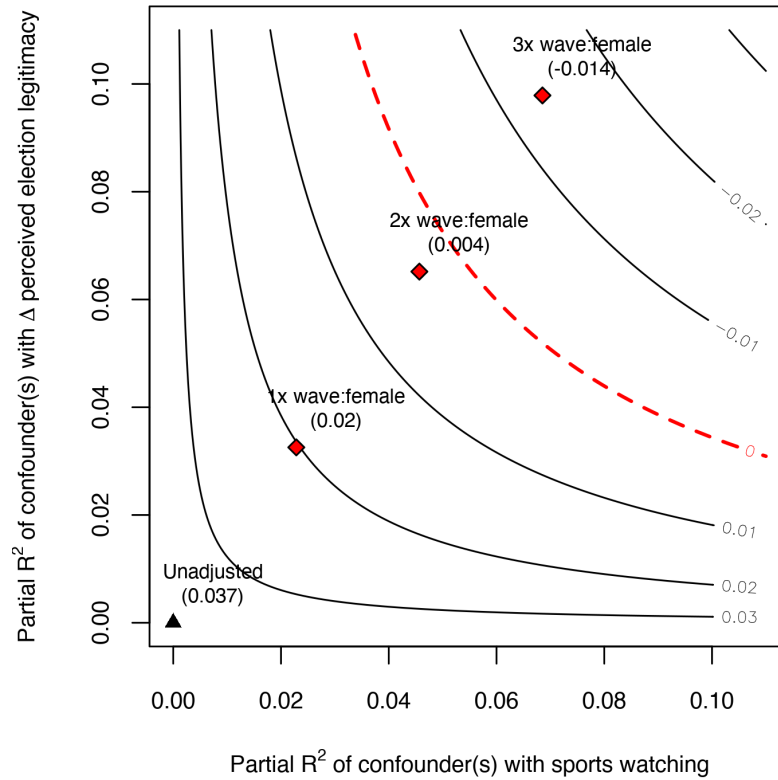


Figure 6: Sensitivity to Demographics (Trump Supporters)

E Text of Experimental Treatments

The video treatments seen by respondents are available at [[url blinded for review]]. The original, unedited videos are

Political Concession: https://www.youtube.com/watch?v=YhHi_2AEPfM

Sports Concession: <https://www.youtube.com/watch?v=ahxLPIPC7vI>

Transcripts of the language used in the videos are below.

E.1 Political concession speech

All text spoken by 2023 Jacksonville mayoral candidate Daniel Davis. Brackets indicate where audio was manipulated, with the speaking congratulating the candidate the respondent did not select as their preferred choice.

Thank you so much. I called [David Talley/Thomas Dobson] earlier and congratulated him on being Mayor Elect of Jacksonville. I have said many times in public occasions that [David/Thomas] loves Jacksonville. There's no doubt in my mind that he does. And I just want to let you know I'm going to do everything I can to make sure Mayor Elect [Talley/Dobson] is successful in making Jacksonville the best Jacksonville it can be. I love my city. I will never stop loving my city. I'm going to serve my city till the day I die. It's just not going to be in the form that I thought it might be 24 hours ago. And that's okay. I talked to Rebecca and the kids earlier and obviously we're still kind of in shock of the results. And I want to make sure that we understand that this doesn't define us as a family. I did exactly what I know I was supposed to do. I was living life with purpose, caring about the citizens of Jacksonville. And what we're going to do next is make sure that Mayor Elect [David Talley/Thomas Dobson] is successful doing the exact same thing.

E.2 Sports concession speech

All text spoken by Golden State Warriors coach Steve Kerr.

First of all I want to congratulate the Lakers. They played a hell of a series; it's a great, great team. I want to congratulate Darwin and his staff; I thought they coached a brilliant series. Darwin has done an amazing job this year. You know in his rookie year as a coach he's pretty much seen it all and you know, you can see his poise and just his nature on the sidelines; how important that's been for their team given everything that that they've been through to get to this point. And so congrats again to Darwin and the staff and and their team of course. LeBron and A.D. are just brilliant players, they controlled the series. I thought we had our chances. To me the series came down to games one and four, and the Lakers outplayed us in the key stretches of those games, you know down the stretch and that's really the difference. But the better team won so congrats to them and good luck to them moving forward.

F Experimental Study Question Wording

F.1 Feeling Thermometer Covariate

“Please rate the following politicians on a thermometer that runs from 0 to 100 degrees. Rating above 50 means that you feel favorable and warm, and rating below 50 means that you feel unfavorable and cool.”

- Donald Trump
- Joe Biden⁷

F.2 Candidate Selection

“If you were voting in this election, which candidate would you vote for? [Thomas Dobson (Republican)/David Talley (Democrat)]”

F.3 Perceived Election Fairness

“In the Jacksonville mayoral election, how likely is it that the following happened? [Very likely, Somewhat likely, Not too likely, Not at all likely]”

- [David Talley/Thomas Dobson] won fair and square
- People voted who were not eligible to vote
- Votes were accurately counted
- Some people who were eligible to vote were prevented from doing so
- Some people voted more than once
- Absentee votes were discarded by partisans
- Voting machines were rigged to favor one side
- Unexpected long lines at polling places caused people not to vote

⁷Respondents were asked about both, but only the Trump feeling thermometer was used as a covariate

G Further Experimental Results

G.1 Table of Experiment Results

This table shows the results from the preregistered model for analyzing the experiment.

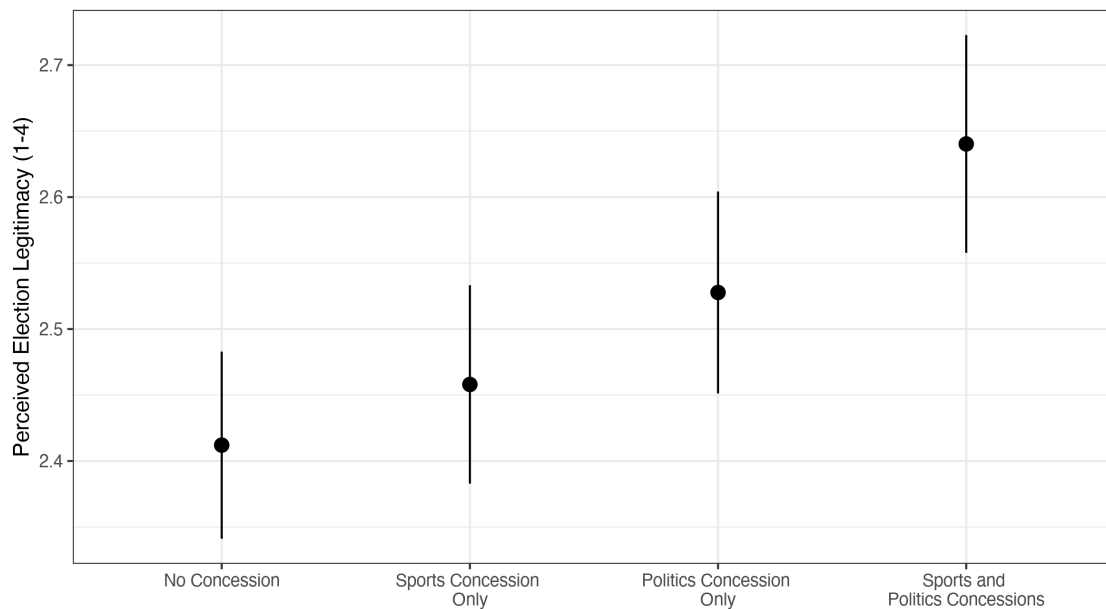
Table 7: Effect of Legitimizing Rituals on Perceived Election Legitimacy

	Perceived Election Legitimacy
Sports Concession	0.078(0.038)*
Political Concession	0.166(0.038)***
Trump Feeling Thermometer	−0.004(0.000)***
Age	−0.001(0.001)
Education	0.007(0.010)
Num.Obs.	1009

* $p < .05$, ** $p < .01$, *** $p < .001$

G.2 Raw Means by Condition

This shows the means and standard errors for each of the four conditions. These are not pooled and not adjusted for covariates.



Error bars represent 95% confidence intervals

Figure 7: Experiment Means by Condition, Unadjusted for Covariates

H Attention Checks

This shows the performance of respondents on each of the two attention checks used in the study. For both, over 80% of respondents correctly identified the winning candidate and the videos they watched. Interestingly, the worst overall performance was due to people who only watched the sports concession saying the video was about both sports and politics.

H.1 “Who won the recent Jacksonville Mayoral Election?”

Table 8: Percent Responses by Winner Name

	David Talley (Democrat)	Thomas Dobson (Republican)
David Talley (Democrat)	5.1	85.3
Jacob Bridges (Democrat)	1.9	4.6
Jeff Marshall (Republican)	3.5	2.8
Thomas Dobson (Republican)	89.5	7.3

H.2 “Which videos did you watch?”

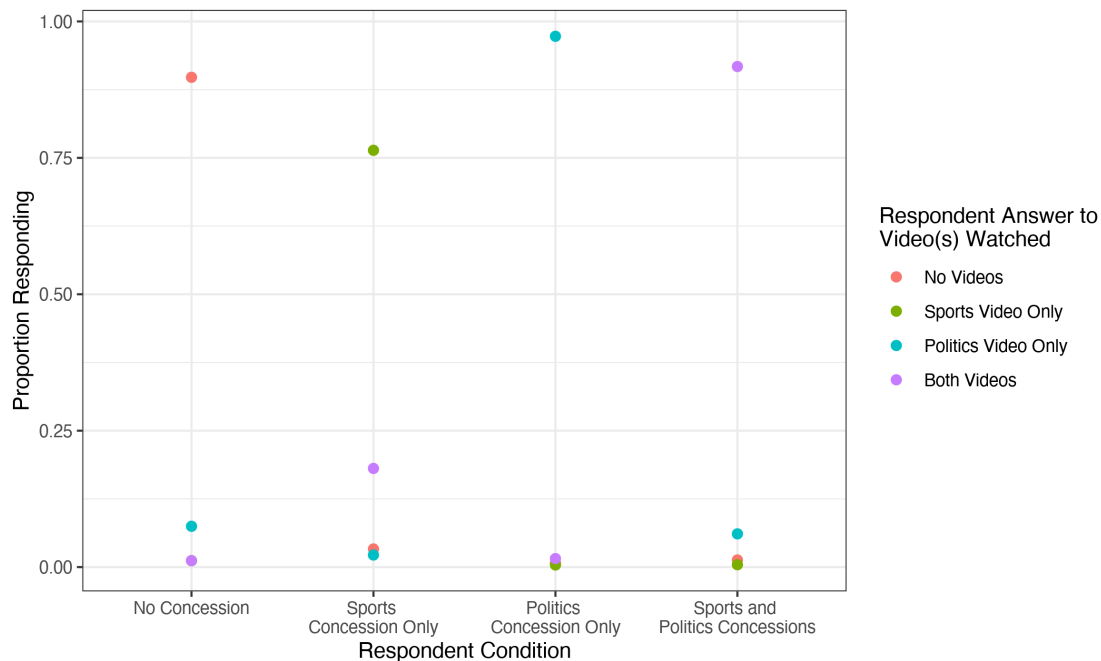


Figure 8: Percent Responses by Condition

I ANOVA Model

This is an alternate model of the experimental results, which includes an interaction between the sports and political concession conditions.

Effect	DFn	DFd	F	p	p<.05	ges
political_concession	1	1002	19.552	1.09e-05	*	0.01900
sports_concession	1	1002	4.366	3.70e-02	*	0.00400
trump_therm	1	1002	70.305	0.00e+00	*	0.06600
age	1	1002	0.561	4.54e-01		0.00056
education	1	1002	0.552	4.58e-01		0.00055
political_concession:sports_concession	1	1002	2.794	9.50e-02		0.00300