

Good Sports and Sore Losers: How Watching Sports Increases Perceptions of Election Legitimacy

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Abstract

What makes people more likely to view electoral defeats as legitimate? In this paper I examine the influence of legitimating rituals, public behavior from competitors that signal that a competition is conducted fairly. Building on social learning theory, I predict that observing legitimating rituals in even ostensibly *apolitical* competitions increases perceptions of election legitimacy. I test my theory using televised team sports, a popular type of competition with frequent legitimating rituals. Two studies test the theory; a panel from before and after the 2020 election, and an experiment manipulating whether respondents are exposed to legitimating rituals. Panel evidence shows sports watching predicted greater acceptance of election defeat in 2020. In my experiment I find that exposing respondents to a legitimating ritual in the context of sports increases perceptions that an unrelated election loss was legitimate. I conclude by discussing the importance of rituals for perceptions of election legitimacy.

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Introduction

Democracy relies on electoral losers peacefully accepting their defeats. Absent this willing (albeit frequently unhappy) acceptance of electoral loss, governments are forced to use coercive force to induce compliance (Tyler 2006). If electoral losers do not believe an election was legitimate, democracies risk instability and potentially a violent struggle for power (Anderson et al. 2005; Moehler 2009). In past American presidential elections, supporters of the losing candidate have been more skeptical of the election processes than supporters of the winning candidate (Sances and Stewart 2015). However, prior to the 2020 election the vast majority of the losing party has always expressed belief that their opponent's win was legitimate (Jones 2016). This changed after 2020, when a majority of Republicans believed that Joe Biden did not win fairly (Griffin and Quasem 2021). The unprecedented level of skepticism towards the election results underscores the importance of understanding what promotes a belief among electoral losers that their undesired election outcome was nevertheless legitimate.

In this paper I introduce the concept of legitimating rituals, regular displays of public behavior that are an expected part of competition and that signal the competition is legitimate. American election campaigns have rituals that serve to reinforce the idea that elections are conducted fairly. During a typical campaign for office there are debates between opposing candidates who shake hands at the end, a sign that the candidates see the other as worthy of respect. At the end of an election the defeated candidate gives a concession speech, congratulating his or her opponent. Finally, in the case of presidential campaigns, the winner is inaugurated in a elaborate ceremony that affirms their status as the victor. In other competitions such as sports, there are similar rituals. Teams shake hands or exchange hugs with their opponents, peacefully accept their losses,

and give post-game press conferences that imply their defeat was legitimate.

Where are people exposed to legitimating rituals? Many Americans are largely disengaged from politics and pay little attention to political news (Krupnikov and Ryan 2022); at most, they might see a presidential candidate they support lose every four years. By contrast, people who watch sports typically see their preferred side lose multiple times in a single year. Sports feature a variety of rituals that promote a narrative that the superior team won fair and square (Sage 1998). People who watch sports typically see multiple losses and the legitimating rituals accompanying those losses each season. Sports are extremely popular in the United States. Sixty-two percent of Americans self-identify as sports fans, thirty-seven percent say they watch sports once a week or more, and twelve percent say they watch sports every day (Consult 2021). In America, of the top 100 most watched broadcasts of 2022, 94 were sporting events (Crupi 2022).

Does watching legitimating rituals in apolitical contexts, such as sports, increase perceptions that political competitions are legitimate as well? I use social learning theory as a framework to understand how people can learn from observing others performing accepting losses in competition, and how people can apply those lessons from apolitical competition to political competition. Social learning theory establishes a set of requirements for people to learn from media and apply those lessons to novel situations. I argue that sports leagues in the United States feature a variety of legitimating rituals that satisfy these requirements, and therefore watching such sports may promote acceptance of defeat in electoral contests. Two studies test the influence of legitimating rituals on beliefs that political defeats are legitimate. First, I use nationally representative panel data from before and after the 2020 election to measure how watching sports moderated reactions to the election outcome. Next, I test whether observing legitimating rituals specifically cause people to believe an election loss was the result of a fair process. I use a survey experiment exposing

people to legitimating messages in both sports and politics and compare the effect of each on perceptions that an election loss was legitimate.

My results indicate that perceptions of election legitimacy fell among supporters of the losing candidate after the 2020 election. Crucially, however, among those who watched sports *more*, perceptions of legitimacy dropped significantly *less*. In my experiment, viewing legitimating rituals in politics and sports were *both* effective at increasing the perception that an election loss was the result of a fair process. Combined, these results show the importance of legitimating rituals in promoting beliefs that defeats in competition were the result of legitimate processes, including defeats in election competitions.

Legitimizing Rituals in Sports and Politics

The traditional explanation for why Americans view elections as legitimate argues that observing American democracy at work promotes acceptance of election losses (e.g. Edelman 1964; Ginsberg and Weissberg 1978; Lukes 1975). This argument contends that American elections have well-established procedures that promote the belief that elections are fair and encourage trust in the political system. Observing the behavior of politicians and “the rituals surrounding their selection and accession to office” (Easton 1975, p. 446) increases support for the political system, independent of which politician wins. Other work has argued that rituals in contexts that are not explicitly political, such as sports, promote and reinforce societal values (Dayan and Katz 1994). I view legitimating rituals as behaviors that occur in competition in general, whether the competition is political or not.

I define legitimating rituals as public behaviors that participants in a contest engage in, and

that signal the contest is conducted using a fair process. Legitimizing rituals may include competitors publicly accepting an outcome that is unfavorable to them, signaling respect for their opponent, making statements endorsing the fairness of the competitive process, or other similar actions. In electoral competition, examples of legitimating rituals include concession speeches where the defeated candidate acknowledges their loss and congratulates their opponent, speeches affirming the importance of adhering to democratic principles, or shaking hands with one's opponent during a debate.

“Legitimizing ritual” is a combination of two ideas: “Ritual”, a behavior that follows a regular pattern and has symbolic aspects that reinforce societal values (Lukes 1975); and “legitimacy”, a durable attachment to a system independent of the outcomes produced by that system (Easton 1965, 1975). Perceptions of legitimacy are rooted in perceptions of whether the procedure used to arrive at an outcome was fair (Tyler 2006). In the case of elections, I view perceived legitimacy as beliefs related to the fairness of the process used to determine the election victor. The perception among Trump's supporters that the 2020 election was illegitimate is reflected in their suspicion that there were many flaws in the election process (voter fraud, fake ballots, voting machine issues, etc.) Therefore, legitimating rituals are patterned behaviors that promote the idea that a competition is legitimate; i.e. that the process for determining the winner was fair, independent of the outcome. I focus on the influence of legitimating rituals on perceptions of electoral losers. Supporters of a winning candidate need little help believing that their candidate's victory was earned through fair processes. It is the belief among supporters of a losing candidate that their loss occurred via fair processes - “loser's consent” - which is crucial for functioning democracy (Anderson et al. 2005).

The effect of these rituals on perceptions of election legitimacy may have received little pre-

vious empirical testing because they were assumed to be a stable feature of the American political landscape. For example, a notable legitimating ritual is the concession speech after an electoral defeat. In a study of reactions to concession speeches, respondents who were told that a politician refused to concede had lower confidence that an election was conducted fairly. However, respondents who were told a politician conceded did not have significantly different beliefs about an election compared to the control group (Vonnahme and Miller 2013). Respondents in the control condition likely assumed that the defeated politician conceded even when they were not told that as part of an experimental manipulation, so one of the intended treatments had no effect. However, with Trump's rejection of these rituals, assumptions that legitimating rituals will be followed might not hold today. While a majority of Trump supporters considered Biden's win to be illegitimate, more than half said they would change their view if Trump publicly conceded (Pennycook and Rand 2021).

While some legitimating rituals were notably absent in the 2020 election campaign, other parts of American culture continue to show competitors peacefully and publicly accepting disappointing losses. Sports teams regularly perform a variety of legitimating rituals to signal that they accept the outcome of a match, win or lose. For example, in the National Hockey League there is a traditional "handshake line" after every playoff series, where the two teams shake hands with one another (Klein 2014). In addition to such unofficial traditions, sports leagues have implemented formal rules to promote the idea that losses are legitimate. In all major US team sports, media outlets have regulated access to talk to players and coaches after a match (Kraft 2021; Moritz, Siemsen and Kremer 2014). Players and coaches are limited in what they are allowed to say in post-game press conferences (Seifert 2016). To encourage gracious acceptance of loss, those who criticize officiating or question the fairness of the outcome often face fines or other

penalties (e.g. Koreen 2023; McDaniel 2023). These efforts from sports leagues to promote beliefs that games are fair appear to have largely been successful. Despite stereotypes of fans griping about referees, majorities of fans of every major team sport approve of referee performance, with avid fans expressing even stronger approval (Affairs 2005; Silverman 2021). When post-game riots occur in North American sports they are more likely to be celebratory riots in response to winning rather than disappointed riots in response to losing (Lewis 2007).

Reactions to Loss in Sports and Politics

Seeing one's preferred side lose is deeply disappointing. One possible way to mitigate the unpleasant emotion of feeling defeat is to reject the loss as illegitimate. Election losers in 2020 who believed the election was "stolen" had higher self-esteem than those who did not (Arceneaux and Truex 2023). In an age of relatively homogeneous political coverage, news portrayed elections as an essential part of democracy and coronated winners as representing the will of the people (Ross and Joslyn 1988; Hershey 1992). With increased media choice, partisan outlets are now more willing to appeal to partisan desires to believe an election loss was illegitimate (Hall and Cappella 2002; Peters and Robertson 2023). Exposure to partisan media now predicts greater drops in perceptions of election legitimacy among electoral losers (Daniller 2016; Grant et al. 2021).

How might legitimating rituals counter the inclination among electoral losers to view their losses as illegitimate? Social learning theory provides a framework for understanding how people learn by observing the actions of others (Bandura 1977). People often model their own actions or beliefs after others they admire, including political beliefs (Wolbrecht and Campbell 2007). By observing admired "role models" and attempting to emulate their behavior, people learn the

appropriate way to react to situations they encounter (Singhal et al. 2004; van Hoorn et al. 2016). Social learning theory has been applied to understand how people's beliefs, affect, and behavior are influenced by those they observe in mass media, not just interpersonal life (Bandura 2002; Singhal et al. 2004).

Social learning theory suggests that four requirements must be satisfied for someone to learn from the behavior of others. First, one must observe the behavior of the model to be emulated (observation); second, one must retain information in a general form so that it can be applied to new situations (retention); third, one must translate the remembered concepts so they are applicable to a situation one faces (translation); and fourth, one must be motivated to follow the behavior of the model when the appropriate situation arises (motivation). Applied to a political campaign, social learning theory suggests that people will emulate the behavior of the politician they support. If the politician engages in legitimating rituals, they are serving as a model for their supporters to accept the election outcome, win or lose.

I theorize that legitimating rituals in ostensibly *apolitical* competitions promote perceptions of *political* competitions as legitimate. In other words, I test whether people who watch sports with legitimating rituals are more likely to emulate the behavior they observe in sports when reacting to other, *non-sports* competitions. Legitimating rituals are a key part of televised sports games, so people who watch sports will frequently observe them. Even legitimating rituals that are not broadcast during the game are widely watched. For example, post-game shows of football matches are often more popular than any cable news program (Nielsen 2023). Rituals should also contribute to an easy-to-retain message of accepting defeat. Sports are presented using a narrative framework where the superior side won due to their virtues and the losing side accepted defeat (Sage 1998). Narratives are easier to remember than discrete pieces of information (Green, Brock

and Kaufman 2004). People who watch sports are highly motivated to emulate the behavior they see from sports figures. This is why athletes are so popular in advertising campaigns; athlete endorsements produce increased sales of the endorsed product, especially after the athlete wins a major match (Elberse and Verleun 2012; Coombs and Harker 2022).

Can sports viewers translate lessons from legitimating rituals they observe in sports to political contests? People translate other beliefs developed through watching sports to politically-relevant attitudes. For example, positive sentiment towards Muslim soccer star Mohamed Salah translated to more positive sentiment towards Muslims in general among supporters of his team (Alrababa'h et al. 2021). Another example is the translation of the narrative of sports success to economic beliefs. Sports fans appear to translate the common sports narrative of effort leading to success to beliefs about economic advancement. Sports fans are more likely to believe that economic success is largely a product of hard work rather than unearned privilege (Thorson and Serazio 2018). I expect that beliefs about the appropriate way to respond to defeat will work similarly; they will be influenced by watching sports and translated to a political context.

Hypotheses

In this study, I test whether observing legitimating rituals in sports promotes the belief among electoral losers that political contests as legitimate. Based on social learning theory, I predict that observing legitimating rituals in sports causes people to be more willing to believe that losses, including election losses, were the result of fair competition. People who see legitimating rituals see those whose behavior they are motivated to emulate peacefully accept defeats in competition. I expect that observing this behavior makes them more likely to accept defeats in other competi-

tions. My theory has three observable implications that I describe in three hypotheses.

First, I hypothesize that people who view more legitimating rituals will be more likely to perceive electoral defeat as legitimate. I assume that people who watch sports more frequently will observe more legitimating rituals in sports. In other words, a person who watches sports frequently receives a stronger “treatment” than someone who watches sports less frequently. People who watch more sports will see more legitimating rituals and therefore be more willing to believe that a political loss was legitimate.

H_1 : People who watch more sports will be more likely to view election losses as legitimate

Second, I hypothesize that observing legitimating rituals associated with a political competition in which one’s preferred side lost will increase perceptions that the competition was legitimate. This is a minimal test of the link between legitimating rituals and viewing political defeats as legitimate - if legitimating rituals in political competitions do not increase perceptions of election legitimacy, legitimating rituals in sports competitions are unlikely to increase perceptions of election legitimacy either.

H_2 : People who see a legitimating ritual associated with a political contest will perceive a defeat in that contest as more legitimate

Finally, I hypothesize that observing legitimating rituals associated with a sports competition will increase perceptions that a *political* competition is legitimate. If legitimating rituals in sports influence generalized beliefs about how to react to losses, their influence should extend to non-sports competitions. This is the stronger test of the link between legitimating rituals and perceiving election defeats as legitimate.

H_3 : People who see a legitimating ritual associated with a sports contest will perceive a defeat in an unrelated political contest as more legitimate

Design, Data and Measures

I test my theory in two steps. First, I use a panel with the same set of respondents from before and after the 2020 election to examine how people who watch sports more react to electoral defeat relative to people who watch sports less. Next, I use a survey experiment to directly manipulate the legitimating rituals respondents see and measure the effect of observing a ritual on perceptions that an electoral defeat was legitimate. Combined, these two approaches provide an observational test of how people reacted in a real election with an experimental test which allows me to directly examine the causal influence of exposure to legitimating rituals.

Panel Study

To test how sports watching predicts reactions to electoral defeat, I use a panel of respondents who were surveyed both before and after the 2020 election. To model the relationship between sports watching and perceptions of election legitimacy, I include both individual and wave fixed effects. Using the same set of respondents over time allows me to evaluate how beliefs about the election *changed* for each respondent after Biden's victory. The advantage of this approach is that it controls for all stable factors, observed and unobserved, which have a stable influence on a respondent's perceptions of election legitimacy (Allison 2009).

My data is a nationally representative panel collected by Amerispeak.¹ Respondents were recruited using address-based random sampling. Vote intention was recorded shortly before the election in October 2020, with respondents reporting who they planned to vote for in the upcoming election. Sports watching was recorded in the post-election April 2021 wave. Perceptions of

¹Details on panel recruitment, survey dates, demographics of panel respondents relative to United States population averages, and panel attrition are available in Appendix A

election legitimacy were measured in both the October 2020 and April 2021 waves. This means I measure how fair people thought the presidential election was going to be shortly before it happened, as well as how fair people thought the election was once the results were known. In total, 2,625 people participated in both the pre- and post- election waves.

To identify which respondents were “winners” versus “losers” in the 2020 election, in the pre-election panel wave respondents were asked which candidate they preferred in the upcoming election. I consider respondents who said they preferred Biden to be “winners” and those who said they preferred Trump to be “losers”, excluding the small proportion of respondents (< 10%) who said they either preferred neither candidate or a candidate besides Trump or Biden. I operationalize perceived election legitimacy as a respondent’s belief in the fairness of election processes. I use a five-item index asking respondents how likely various fair/unfair processes would happen/happened. For example, believing votes were cast by people not eligible to vote would indicate low perceived election legitimacy while believing that votes were accurately counted would indicate high perceived election legitimacy. Each question was measured with a four-point Likert scale, from “Very Likely” to “Not at all Likely”.² I operationalize sports watching as the extent to which people watched team sports.³ I selected team sports for two reasons. First, team sports have a clear losing side (unlike a sport like golf, where there is not a singular “loser”), so I expected that team sports would feature more legitimating rituals. Second, team

²Items in this index did not correlate well together (α .42 before the election, α .68 afterwards). Democrats and Republicans vary in their level of concern regarding specific threats to the election process (Ansolabehere and Persily 2008; Park-Ozee and Jarvis 2021). The index can therefore be best thought of as an additive tally of different concerns, where people are more likely to be concerned about some flaws in the electoral process rather than others based on party. To avoid issues arising from between-subject variation in which threats to election fairness are considered more serious, I exclusively measure individual-level *changes* in perceptions of fairness from before to after the election.

³As a robustness test, in Appendix C I replicate my analysis from this study using other sets of sports as the independent variable of interest. There are no significant differences in results, regardless of which set of sports are used to operationalize sports watching.

sports are more popular in America than individual sports. The five most popular sports to watch are all team sports (Newall, Feldman and Mendez 2023). To measure sports watching, I asked how frequently a respondent watched each of the five most popular sports in America (football, baseball, basketball, hockey, soccer) when that sport was in season (de Vreese and Neijens 2016). Response options were measured on a five-point scale from “several times a week or more” to “never”. Watching each of the sports was strongly positively correlated with watching each of the others ($\alpha = .75$).

This panel analysis serves as a test of how sports watching moderated changes in perceptions of election legitimacy from before to after the 2020 election (hypothesis 1). However, in the panel I measure sports viewing, which is an indirect measure of exposure to legitimating rituals. To test the proposed mechanism, and provide evidence that legitimating rituals specifically increase perceptions of election legitimacy (hypotheses 2 and 3), I use an experiment manipulating exposure to legitimating rituals.

Experimental Study

In the experiment, I manipulate the legitimating rituals that respondents are exposed to and test how exposure influences perceptions of election legitimacy. Specifically, in this experiment I use concession speeches as a test of my theory. Concession speeches are a legitimating ritual which is similar in sports and politics, enabling similar “treatments” across conditions. I expose respondents to concession speeches in politics and sports, testing how they influence reactions to an election where the respondent’s preferred candidate lost.

Post-election concession speeches are a major legitimating ritual in American politics, where

the defeated candidate publicly acknowledges his or her defeat. Concession speeches from politicians have historically followed a rhetorical pattern that emphasizes re-framing losses and mitigating disappointment from supporters who may have invested large amounts of time, effort, and emotion into a campaign. Political losers have traditionally used the concession speech to praise democracy, thank those who worked on the campaign, and promise eventual victory in later elections (Corcoran 1994; Mirer and Bode 2015). Post-defeat press conferences among coaches are remarkably similar to post-defeat concessions by defeated politicians. Analysis of coaches' post-match comments after defeats in basketball (Llewellyn 2003) and football (Enterline 2010) found similar rhetorical patterns to those in political concessions, where a competitor acknowledges the winner, identifies positives to take from the loss, and commiserates with disappointed supporters. While defeated coaches and defeated politicians talk about different competitions, their statements contain similar features. Both make it clear which side won while simultaneously cushioning the blow for those disappointed by the loss.

The experiment used a 2x2 design, with the first factor being assignment to watch a sports concession speech and the second factor being assignment to watch a political concession speech. Therefore, there were four total conditions (sports concession and political concession, sports concession only, political concession only, no concessions), with roughly equal numbers of respondents in each. The sample was 1,009 United States respondents recruited from the survey provider Forthright. Respondents were recruited from all states except Florida due to the dependent variable measuring perceptions about an election in Florida. Because the survey evaluated perceptions of whether an electoral defeat was the result of fair processes and pure independents were expected to have weaker reactions to political defeats, all respondents recruited for the study identified as either Democrats or Republicans (including leaners).

To analyze the study, I preregistered two hypotheses, corresponding to hypotheses 2 and 3.⁴ First, I hypothesized that respondents who saw a political concession would consider an election loss to be more legitimate. Second, I hypothesized that those who saw a sports concession would consider an election loss to be more legitimate. Additionally, I preregistered three covariates, all of which were measured pre-treatment: age, education, and Trump feeling thermometer. Age and education have predicted perceptions of election legitimacy in past elections (Bowler et al. 2015; Enders et al. 2021). I included Trump feeling thermometer as I expected that respondents who remained strong Trump supporters may have been more suspicious of elections in general after Trump's 2020 defeat. Perceived election legitimacy was modeled using the following equation:

$$\text{PerceivedElectionLegitimacy} \sim \beta_1 \text{PoliticalConcession} + \beta_2 \text{SportsConcession} + \beta_3 \text{Education} + \beta_4 \text{Age} + \beta_5 \text{TrumpFeelingThermometer} + \varepsilon$$

The experiment design is summarized in figure 1 and proceeded as follows: All respondents read an initial description saying they would read or watch videos about a set of news stories before giving their opinion on them. Respondents in the sports concession conditions then read about a recent basketball game and watched a video of part of the defeated coach's post-game press conference.⁵ These respondents answered a set of questions about what they thought about the game.

All respondents then read a description of the 2023 mayoral election in Jacksonville, Florida. The description included information about two candidates running, as well as the candidates' party affiliations and policy positions. The candidates and their policies were fictional, and all respondents saw the same information about the election and the candidates running. Respondents

⁴Preregistration available at https://aspredicted.org/blind.php?x=1TD_KY4

⁵Detailed description of all treatment videos in appendix E

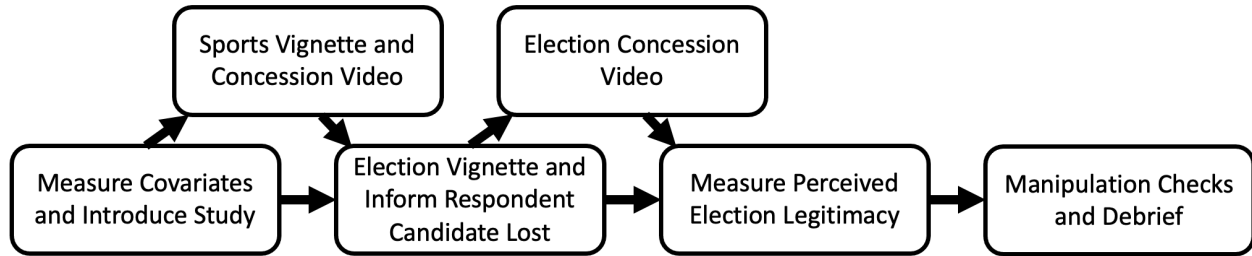
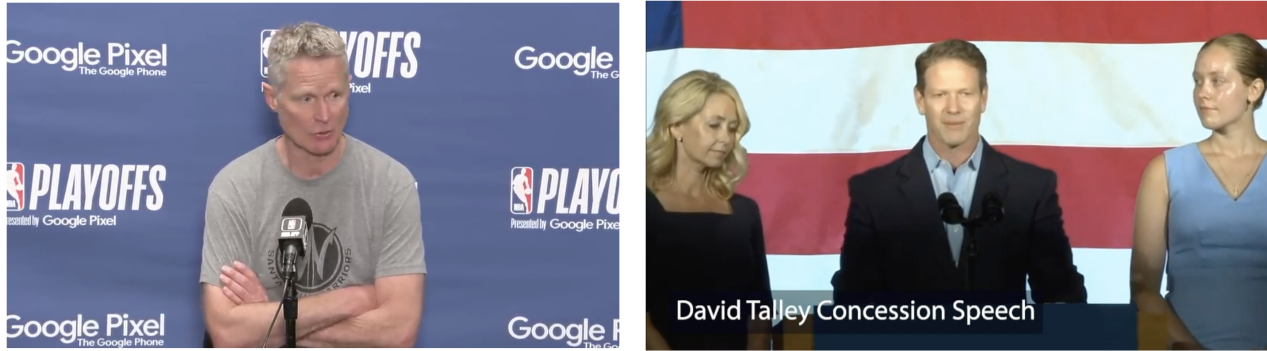


Figure 1: Diagram of Experimental Procedure

were asked to select which of the two candidates they would vote for if they were voting in that election. To make respondents more attached to their choice, all respondents were asked to write about why they selected their candidate. After selecting their preferred candidate and justifying their choice, all respondents were then told that their preferred candidate had lost in a close election, and the other candidate was the winner.

Next, respondents in the political concession conditions watched a video of a politician give a concession speech, which was presented to them as the concession speech from the candidate the respondent expressed support for. To make the political legitimating ritual a realistic treatment, the video was an edited version of the actual concession speech given by the losing candidate in the 2023 Jacksonville mayoral election. To ensure a consistent treatment regardless of which candidate each respondent chose (and therefore which candidate the respondent was told won the election), portions of the audio in the speech were manipulated using AI voice-cloning program Coqui.ai based on the speaker’s vocal patterns. This approach ensures a high degree of control in the experimental treatment. All respondents in the political concession conditions, regardless of which candidate they expressed a preference for, watched an identical concession speech, with the only difference being the candidate name the speaker congratulated.

Finally, all respondents answered an index of questions about whether they believed the 2023 Jacksonville mayoral election was conducted fairly. Respondents were then asked which can-



(a) Sports Concession Treatment

(b) Political Concession Treatment

Figure 2: Screenshots from Experimental Treatments

didate won the Jacksonville election and which videos they watched. These questions served as manipulation checks. Respondents who failed the checks were not excluded from analysis, meaning my results serve as intent-to-treat estimates. At the conclusion of the survey, respondents were debriefed about the real 2023 Jacksonville mayoral election.⁶ The manipulations were successful. More than 80% of respondents successfully identified the candidate they had been told won the election and the video(s) they watched.

To measure whether respondents viewed the electoral defeat as legitimate, I used an expanded version of the perceived election legitimacy measure used in the panel study. This eight-item index asked respondents whether they believed various fair or unfair processes happened during the election. All questions were measured on a four-point Likert scale from “very likely” to “not at all likely”. Questions were coded so higher numbers represented increased belief the election was legitimate. For example, “votes were accurately counted” would be a belief the election pro-

⁶Respondents were also asked at the end of the survey if they had family or friends from Jacksonville, with the preregistered intent to drop these respondents from analysis since they were more likely to know about the real election and not be influenced by the treatment. Removing respondents based on post-treatment variables is discouraged because the practice can distort estimates if those variables are affected by the treatment (Montgomery, Nyhan and Torres 2018; Mutz 2021). I noted this risk in the preregistration but anticipated this post-treatment question would be unrelated to the treatment. However, respondents in the treatment conditions were significantly more likely ($p < .01$) to say they had friends or relatives in Jacksonville. Therefore, I did not exclude any respondents based on their response to this question.

cess was fair while “some people voted more than once” would be a belief the process was unfair. This index held together well ($\alpha = .84$), indicating that various concerns about the procedures in the Jacksonville election were positively correlated with one another.

Results

Changes in Perceived Legitimacy in the 2020 Election

I first use the panel data to test Hypothesis 1, that supporters of a losing candidate who see more legitimating rituals will decline less in their perceptions of election legitimacy. For ease of interpretation, I visually illustrate how perceptions of the legitimacy of the 2020 election changed over time, split by how much respondents watch sports. In figure 3, I show how perceptions of election legitimacy changed among those who supported the losing candidate (Trump) versus those who supported the winning candidate (Biden). I split respondents into groups of “high” and “low” sports watchers, where those who are above the median level of sports watching are “high” sports watchers and those below the median are “low” sports watchers.

Figure 3 shows that, consistent with past elections, election winners increased their perceptions of election legitimacy while election losers decreased their perceptions of election legitimacy (Sances and Stewart 2015; Daniller and Mutz 2019). Crucially, it also shows that among election losers, watching sports moderated the reaction to the loss. Election losers lowered their perceptions of election legitimacy regardless of the amount of sports they watched. However, perceived election legitimacy among high sports watchers dropped *less* than it did among low sports watchers. In contrast, election winners increased perceptions of election legitimacy; but this in-

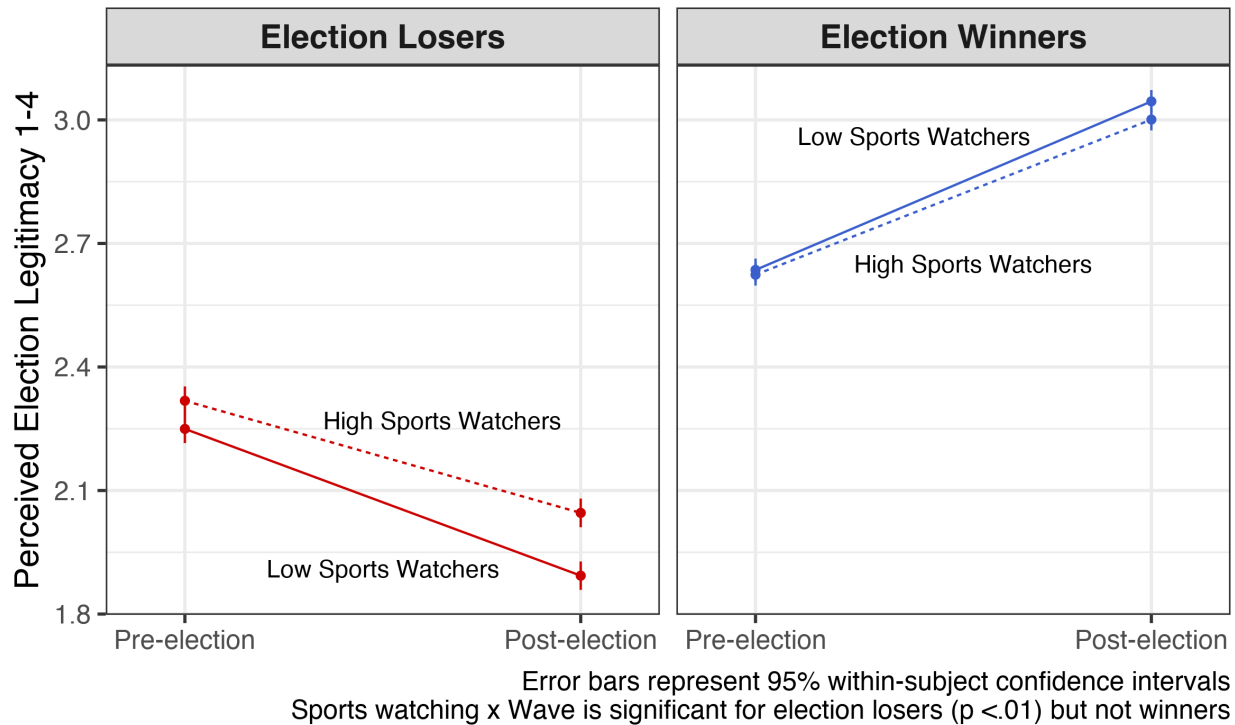


Figure 3: Changes in Perceived Legitimacy by Candidate Support and Sports Watching

crease was similar among both high and low sports watchers.

To test Hypothesis 1, I model the change in election legitimacy using a panel regression model with individual-level fixed effects. This approach has the advantage of eliminating the need to control for time-invariant individual characteristics such as age, race, and any other stable personal characteristics (Allison 2009). Since sports watching was measured at one point in time and a fixed effect approach controls for all time-invariant predictors, I interact my predictors (election defeat and sports watching) with the wave variable. Table 1 models the relationship between wave, election defeat, sports watching, and perceptions of election legitimacy.

The results in table 1 quantify the pattern illustrated in figure 3. Perceptions of election legitimacy rose among winners (Biden supporters) by .393 points on the 1-4 scale. By contrast, perceptions of election legitimacy fell by .706 points for losers (Trump supporters) relative to Biden

Table 1: Watching Sports Predicts Changes in Election Legitimacy among Losers

	Δ Election Legitimacy
Wave	0.393(0.014)***
Wave x Election Loser	-0.706(0.022)***
Wave x Sports Watching	-0.009(0.014)
Wave x Election Loser x Sports Watching	0.070(0.024)**
N	2365

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

All models use within-person fixed effects; sports watching measured in standard deviations

supporters. Among those who supported the losing candidate, higher levels of sports watching were significantly positively associated with increased perceptions of election legitimacy. A one-standard deviation increase in sports watching would predict a .070 point increase in perceptions of election legitimacy ($p < .01$). Among those who supported the winning candidate, there was no significant relationship between watching sports and changes in perceptions of election legitimacy.

How large is the increase in perceived election legitimacy among election losers? To contextualize the strength of the relationship between sports watching and changes in perceptions of election legitimacy, I compare changes in perceptions of election legitimacy among electoral losers who watched sports versus electoral losers who watched Fox News. Election coverage on Fox News featured conspiracy theories and repeatedly questioned the integrity of the 2020 election (Peters and Robertson 2023). In the post-election (April 2021) wave I asked whether respondents watched a set of news programs, including fourteen programs on Fox News. I summed the number of Fox News programs each respondent reported watching, then re-scaled the measure to have a mean of 0 and standard deviation of 1 to match the scale of the sports watching index.

Table 2 compares the predicted change in perceived election legitimacy among electoral losers

Table 2: Change in Perceived Election Legitimacy among Trump Supporters

	Fox News Watching	Sports Watching
Wave	-0.307(0.019)***	-0.313(0.018)***
Wave x Fox News Watching	-0.021(0.012)	
Wave x Sports Watching		0.061(0.020)**
N	979	979

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

All models use within-person fixed effects; sports and Fox watching measured in standard deviations

for a one-standard deviation change in sports watching versus a one-standard deviation change in Fox News watching. Among electoral losers, a one-standard deviation increase in Fox News watching predicted a .021 point decrease in perceived election legitimacy relative to pre-election attitudes (not significant at $p < .05$). By comparison, among electoral losers a one-standard deviation increase in sports watching predicted a .061 point increase in perceived election legitimacy relative to pre-election attitudes ($p < .01$). In other words, watching sports was substantially *more* predictive of a change in perceived election legitimacy among Trump supporters than watching Fox News. Trump supporters who watched Fox had lower perceptions of election legitimacy after the election, but this was because they had lower perceptions of election legitimacy before the election as well. This result highlights the importance of examining how attitudes *changed* in response to an electoral loss, rather than only examining post-election beliefs.

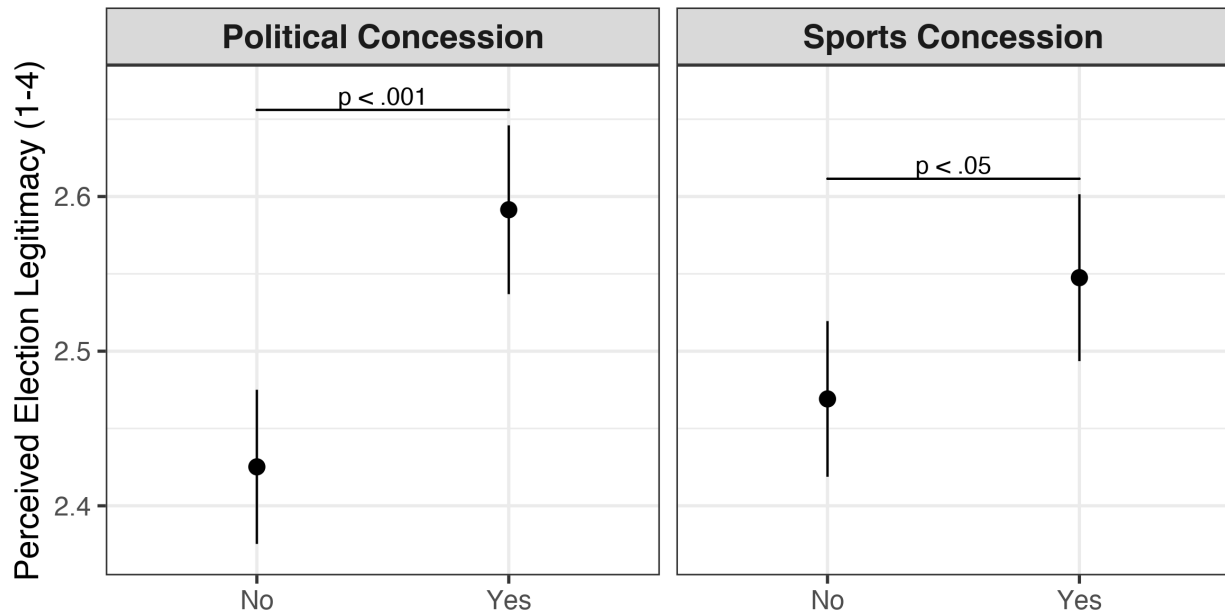
Overall, results from the panel analysis indicate that election losers decreased perceptions of election legitimacy while winners increased perceptions of election legitimacy. Among losers, those who watched more sports decreased less while those who watched less sports decreased more. This relationship was not present among election winners. The relationship between watching sports and reaction to election loss was stronger than the relationship between other media consumption and reaction to election loss. These results are in line with my expectations that

watching sports predicts greater acceptance of electoral loss. However, it does not test the proposed mechanism; namely, that the legitimating rituals in sports cause people to be more willing to accept disappointing losses. In the next section, I discuss my results from the experiment, which directly tests the effect of exposure to legitimating rituals.

Effect of Legitimizing Rituals

I use an experiment to test hypotheses 2 and 3; that legitimating political rituals increase perceptions that a political loss was legitimate and that legitimating sports rituals increase perceptions that a political loss was legitimate. To test the hypotheses I compare the differences in means between the two factors (exposed to legitimating ritual in politics and exposed to legitimating ritual in sports), adjusted based on the covariates included in the preregistered model. To test hypothesis 2, that respondents who saw the political concession would consider the election more fair, I compare the mean for the pooled political concession conditions versus the pooled political no-concession conditions. To test hypothesis 3, that respondents who saw the sports concession would consider the election more fair, I compare the mean for the pooled sports concession conditions versus the pooled sports no-concession conditions. Figure 4 displays the covariate-adjusted marginal means for those who saw a political concession speech versus those who did not, and those who saw a sports concession speech versus those who did not. In other words, it compares means across the pooled conditions grouped by whether respondents saw the political concession speech in the first panel and grouped by whether respondents saw the sports concession speech in the second panel.

Hypothesis 2 and hypothesis 3 are both supported. People who watched a defeated politician



Points represent estimated means adjusted for Age, Education, Trump Feeling Thermometer
 Error bars represent 95% confidence intervals

Figure 4: Effect of Political Concessions and Sports Concessions

concede believed that politician’s loss was more legitimate ($p < .001$). More notably, watching a concession speech in sports - an area ostensibly unrelated to politics - *also* caused people believe that the politician’s loss was legitimate ($p < .05$). These results indicate that the political concession speech was more effective than the sports concession speech at making people view the election loss as legitimate. But critically, and supporting hypothesis 3, the sports concession speech significantly increased perceptions of election legitimacy.

Effect sizes were calculated based on the preregistered model, including covariates. Respondents who watched a sports concession speech had perceptions of election fairness that were .08 points higher on the 1-4 scale than those who did not, equivalent to an increase of .13 standard deviations. Respondents who watched the political concession speech were on average .16 points higher than those who did not on a 1-4 scale ($p < .001$), equivalent to an increase of .26 standard

deviations. How substantively large are these effects? While the .13 standard deviation increase for the sports concession speech may not seem large, that is in many ways a remarkable increase. There are many more sports games, sports losses, and sports concession speeches than there are in widely-watched political elections. Furthermore, the political concession speech was directly tied to the specific electoral defeat, while the sports concession speech was about a completely different contest.

The fact that the effect of the sports concession speech was even half as large as the political concession speech speaks to the power of entertainment media to influence political attitudes. The sports concession speech was about an entirely unrelated contest to the Jacksonville election. It made no reference to politics or anything that would conventionally be thought of as a political topic. The speech did discuss why the team lost and why that loss was legitimate, commiserated about the frustration of defeat, and encouraged team supporters that the team would be back next year. In other words, it had the same features as a political concession speech, even though it was about a different competition. Consistent with past work on the surprising effectiveness of even generic “good loser messages” (Esaiasson, Arnesen and Werner 2023), the general message about being a good loser was sufficient for the sports concession to influence political beliefs.

In Appendix I, I perform an additional (not preregistered) analysis where I include an interaction between the sports concession and political concession conditions in the model. If this interaction is negative, that would imply that legitimating rituals in sports only influence perceived election legitimacy when legitimating rituals in politics are absent. However, I observe a positive (although not statistically significant) interaction. The significant effect of the sports concession combined with the lack of a negative interaction between the two factors implies that observing legitimating rituals has an additive effect. Additional “dosage” of exposure to legitimating rituals

increases perceptions of legitimacy after a loss.

Discussion

Why are some people more likely than others to see electoral defeats as legitimate? In this study I develop the concept of legitimating rituals. I test the influence of such rituals that appear in sports on perceptions of election legitimacy. I found that in 2020, electoral losers who watched more sports lowered their perceptions of legitimacy less than those who watched less sports. Moreover, I found that observing legitimating rituals, in both politics and sports, promoted belief that an electoral loss was legitimate. These results suggest that regular behavior by competitors signaling that competition is fair increases acceptance of political defeats; even if the rituals occur in non-political competition.

There are several limitations of this study. First, it is unclear to what extent my findings generalize to future elections. In my panel, I observe patterns of reacting to the 2020 election that are in line with my theoretical predictions. However, the 2020 election was highly anomalous, with a losing candidate who refused to concede (Wooley and Peters 2021). Whether the observed patterns generalize to other elections where candidates engage in normal legitimating rituals remains to be seen. However, in the experimental study there was an additive effect of seeing legitimating rituals in politics and sports. This finding implies that observing legitimating rituals in sports increases perceptions of election legitimacy, even in elections where normal legitimating rituals are followed.

Second, I make several assumptions in panel analysis of the 2020 election. I show that Trump supporters who watched sports more changed their perceptions of election legitimacy more fa-

vorably compared to those who watched sports less. This panel approach controls for all stable variables that have a stable influence over time on the dependent variable of interest (in this case, perceptions of election legitimacy). However, there are two potential concerns. First, I measure sports watching only in the post-election wave, assuming that sports watching is stable over time. While I do not test this assumption, sports watching in aggregate has been stable over time (Jones 2015) and resilient to political controversy (Peterson and Muñoz 2022). Second, I assume that watching sports is not correlated with some other variable that moderated reactions to the 2020 election among Trump supporters.

In appendix D, I test how robust my results are to violations of the assumption that sports watching is not correlated with another variable that moderates change in perceptions of election legitimacy. First, I test if the relationship between watching sports and changes in perceived election legitimacy is explained by differences in news consumption. People who watch more sports on TV watch more television in general, including more TV news. It may be that Trump supporters who watch more sports also watch more news coverage that claimed Biden's win was legitimate, so the observed patterns in the panel study are due to differences in non-sports media consumption. To test this, in the post-election wave I ask respondents whether they watch 37 news programs across a variety of networks. I then construct indexes based on how many programs from each network a respondent reported watching. Including these additional variables did not substantially change my results, and watching sports predicted changes in election legitimacy among Trump supporters more strongly than any other news consumption variable.

Might there be some other variable which predicts both higher levels of sports watching and positive changes in perceptions of election legitimacy among Trump supporters? It is impossible to test every possible variable. Instead, I establish bounds on how strongly a variable would

need to predict both sports watching and a change in perceptions of election legitimacy among Trump supporters to negate the relationship between watching sports and changes in perceptions of election legitimacy Cinelli and Hazlett (2020). I select a set of demographics which predict higher levels of sports watching (Norman 2018; Wann et al. 2001) and interact them with the wave variable (as opposed to the model used in table 1 which assumes that stable demographics have stable influence on perceptions of election legitimacy over time). I find that a variable more than twice as predictive as any of the demographics would be needed to negate the relationship between sports watching and changes in perceptions of election legitimacy among Trump supporters. While this does not rule out that the relationship between sports watching and changes in perceptions of election legitimacy are due to some other variable, it is not obvious what that other variable would be.

In the experimental test, I examine an election that respondents knew nothing about. Their attitudes about the mayoral election described in the experiment were likely far more malleable than they would be in a more typical election. The effect of sports messages may be considerably smaller if attitudes about an election are crystallized. Respondents also saw the sports concession speech shortly prior to seeing information about the Jacksonville election. It is unclear how long the effects of watching sports concession speeches would last in a more realistic context. On the other hand, respondents are only exposed to a single “treatment”, which does not account for the effect of numerous treatments from years of watching sports. Additionally, respondents likely felt less motivated to emulate the behavior they saw in the videos than if they had actually been supporters of the politician or sports figure.

Conclusion

This work has implications for studies of both media effects and election legitimacy. Conventional theories of opinion formation emphasize the influence of elite political messages which disseminated and recalled by public when forming political beliefs (Zaller 1992). This research focus is reflected in studies of perceptions of election legitimacy which examine the influence of messages from political elites to the public (Clayton et al. 2021; Clayton and Willer 2023; Wutke, Sichart and Foos 2023). However, public opinion on a variety of issues is shaped by consumption of non-news media, including sports media (Kim 2023; Alrababa'h et al. 2021; Thorson and Serazio 2018; Rackstraw 2023). This study shows how perceptions of election legitimacy are also influenced by non-political media.

Legitimizing rituals are a promising avenue to promote election legitimacy for a number of reasons. First, they can occur in non-political settings. By contrast, explicitly political messages from elites to promote election legitimacy faces a number of challenges. Such messages must come from co-partisans to be effective (Clayton et al. 2021; Clayton and Willer 2023). If a message of fair competition is presented on media that is not overtly political, it may avoid backlash from partisans. In an age where preferences for even narrative entertainment are increasingly sorted along partisan lines (Fioroni et al. 2022), sports are one of the last genres of media which large numbers of Americans across parties consume (Levendusky 2023). Second, legitimizing rituals are repeated behavior. Even when political messages are effective, their effects tend to be short-lived (Gerber et al. 2011; Hill et al. 2013). By contrast, repeated rituals can have reinforcing effects, building up general ideas about how the world works rather than one-off messaging. Moreover, the public, performative aspect of rituals may make them more compelling than ordi-

nary political talk (Howell, Porter and Wood 2017).

Currently, there are no enforcement mechanisms in American politics to ensure that political figures follow legitimating rituals. In the 2024 Republican primaries, Trump has already vowed not to participate in any debates, another departure from traditional campaigning (Fortinsky 2023). It is not clear whether Trump's decision to flout legitimating rituals will be copied by other political figures. Unfortunately, the electoral penalties for eschewing rituals may be small. Compared to other political considerations, Americans value adherence to democratic principles strikingly little (Graham and Svulik 2020). If a behavior is no longer regularly performed, it is no longer a ritual. If Americans see rituals as little more than empty traditions, their influence may diminish. By contrast, while many legitimating rituals are informal some are mandated by leagues with enforcement mechanisms to induce compliance (e.g. Ames 2023).

The 2023 Super Bowl ended in a nail-biter after a contentious decision by the referees. Less than a minute after the game ended, the television broadcast showed players from the opposing teams hugging and amicably shaking hands. In his post-game comments, the Eagles' star quarterback re-framed the loss as a learning opportunity for the team (Scott 2023). More than half of the United States population watched the Super Bowl (Greenberg 2023), and saw these messages that the competition was legitimate, similar to the messages they saw in countless other sports matches. In 2023, far more people watched that game than coverage of any political event. This study sheds new light on how these actions matter.

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Appendix 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

	Attrition	Panel Respondents
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

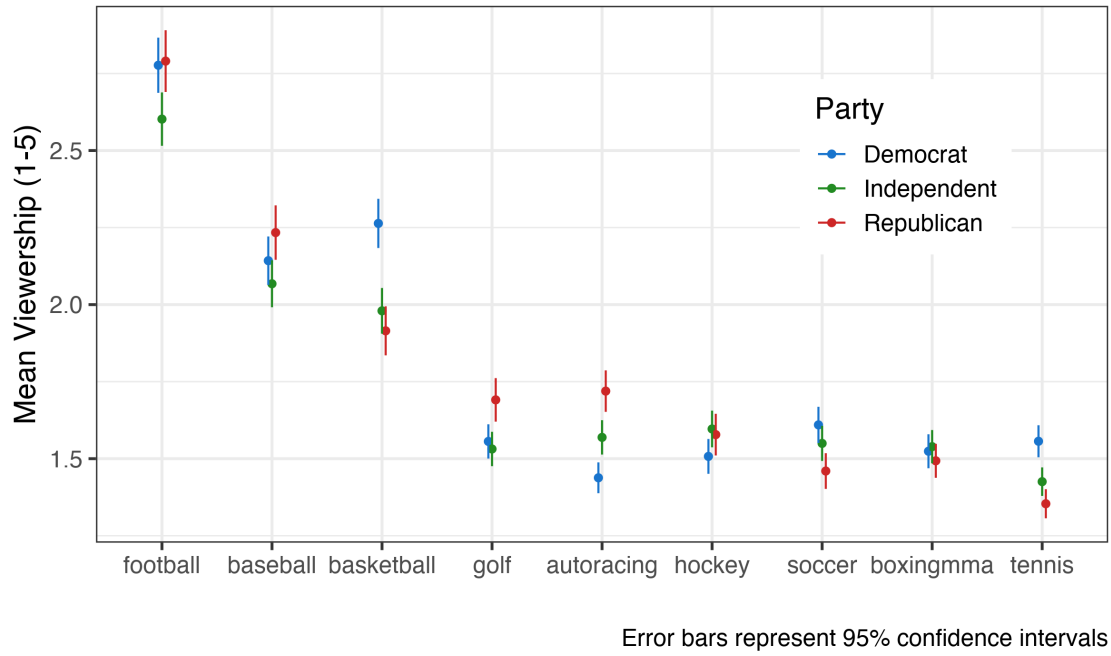


Figure 5: Sports Viewership by Sport and Party Identification

Appendix 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

Appendix C Testing Alternative Sets of Sports

In this section, I redo my analyses from Study 1 using different sets of sports. I compare 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	0.393*** (0.014)	0.393*** (0.014)	0.393*** (0.014)
Wave x Sports Watching	-0.009 (0.014)	-0.009 (0.013)	-0.012 (0.013)
Wave x Election Loser x Sports Watching	0.070** (0.024)	0.071** (0.025)	0.077** (0.025)
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, regardless of which sets of sports are used in the models, the patterns of changes in perceptions of election legitimacy are very similar.

Appendix D Sensitivity Analysis

D.1 Sensitivity to Demographics

Instead of modeling only the relationships between watching team sports, perceptions of election fairness, and trump support, these models include demographics which are correlated with watching sports (Wann et al. 2001).

Included variables: Age, Sex, Race, Education, Income. All variables were measured pre-election and interacted with the wave variable, with the same individual-level fixed effects. So the sensitivity model was:

$$\text{Perceived Election Legitimacy} \sim \text{Team Sports} * \text{Wave} + \text{Race} * \text{Wave} + \text{Income} * \text{Wave} + \text{Sex} * \text{Wave} + \text{Education} * \text{Wave}$$

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>wave:team sports</i>	0.012	0.007	1.694	0.3%	5.3%	0%
df = 972	Bound (1x <i>wave:female</i>): $R^2_{Y \sim Z X, D} = 3.1\%$, $R^2_{D \sim Z X} = 2.1\%$					

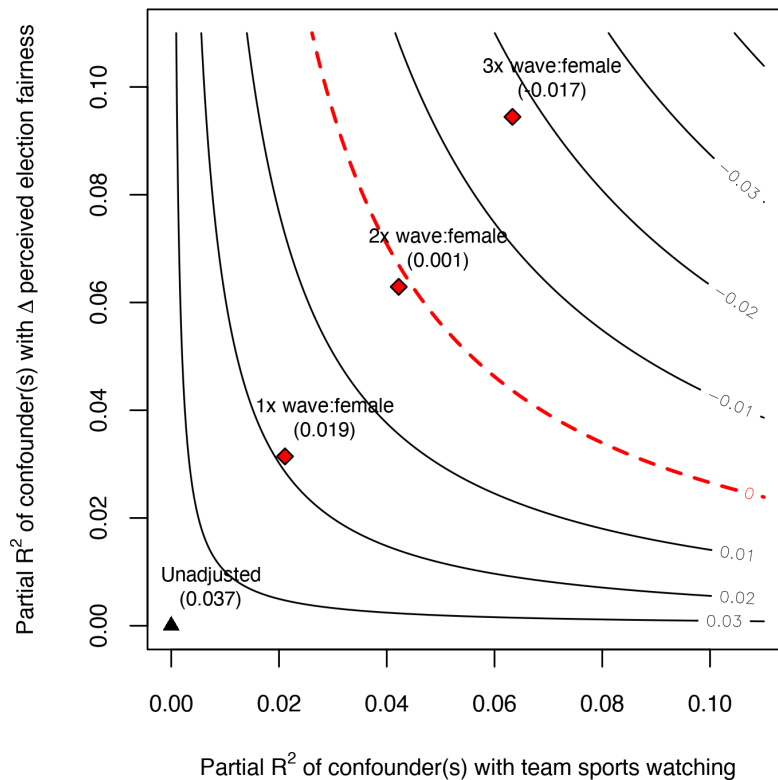


Figure 6: Sensitivity to Demographics (Trump Supporters)

D.2 Media consumption among sports viewers

Another potential concern is that while sports viewers do not differ along demographics that predict different reactions to the election, people who watch more sports have a different news media diet than people who watch less sports.

In the post-election wave, I used a program-list measurement (Dilliplane, Goldman and Mutz 2013), asking people whether they watched 48 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.

- **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

I use the same sensitivity approach as I did for the demographics. In this case, the variable most strongly positively associated with the independent and dependent variable was watching CNN. Among Trump supporters, including the media consumption variables did not change the strength of the relationship between sports watching and changes in perceptions of election legitimacy. None of the media consumption variables substantively changed the relationship between watching team sports and changes in perceptions of election fairness.

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>wave:team sports</i>	0.022	0.007	2.947	0.9%	9%	3.1%
df = 972	<i>Bound (1x wave:cnn watching): $R^2_{Y \sim Z X, D} = 0.9\%$, $R^2_{D \sim Z X} = 0.2\%$</i>					

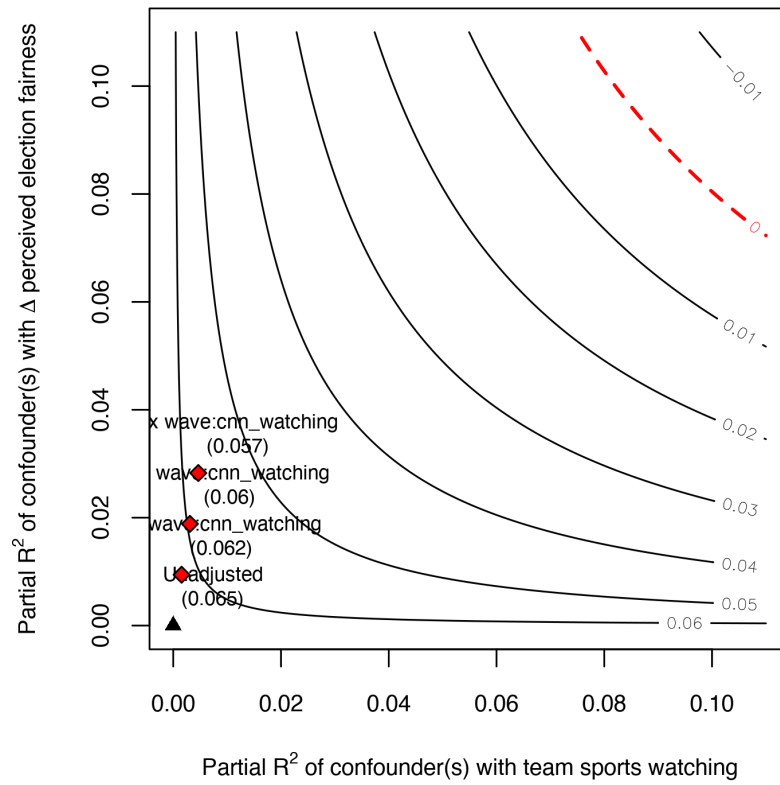


Figure 7: Sensitivity to Demographics (Trump Supporters)

Appendix E Text of Experimental Treatments

The video treatments seen by respondents are available at <https://osf.io/rcezp/files/osfstorage>. 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.

Appendix 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 Biden]”

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

Appendix G Further Experimental Results

G.1 Table of Experiment Results

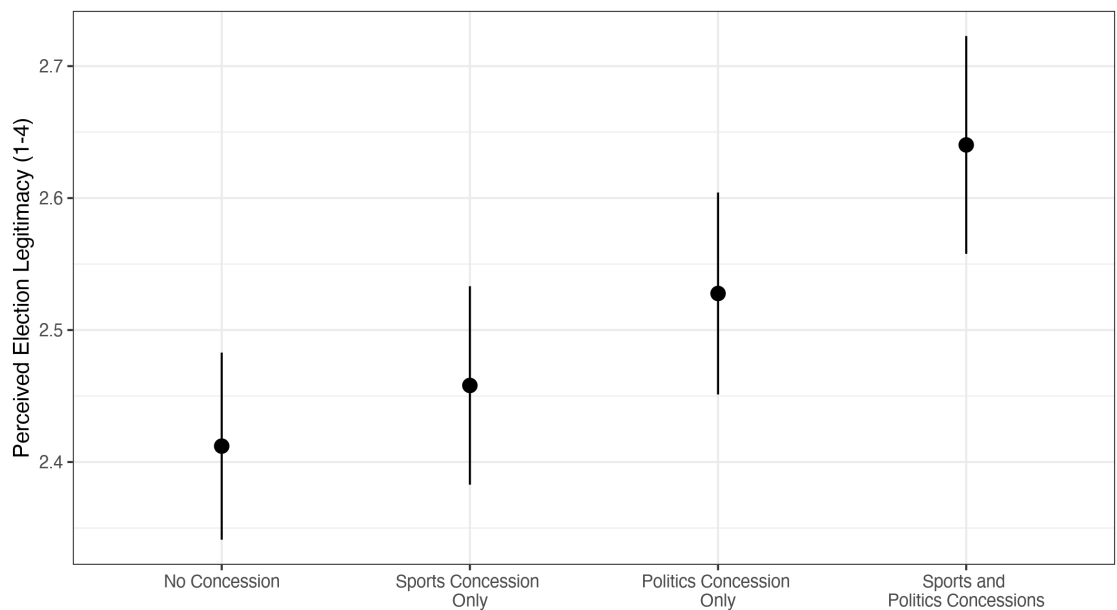
This table shows the results from the preregistered model for analyzing the experiment.

Table 6: 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



Error bars represent 95% confidence intervals

Figure 8: Experiment Means by Condition, Unadjusted for Covariates

Appendix H Attention Checks

“Who won the recent Jacksonville Mayoral Election?”

Table 7: 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

“Which videos did you watch?”

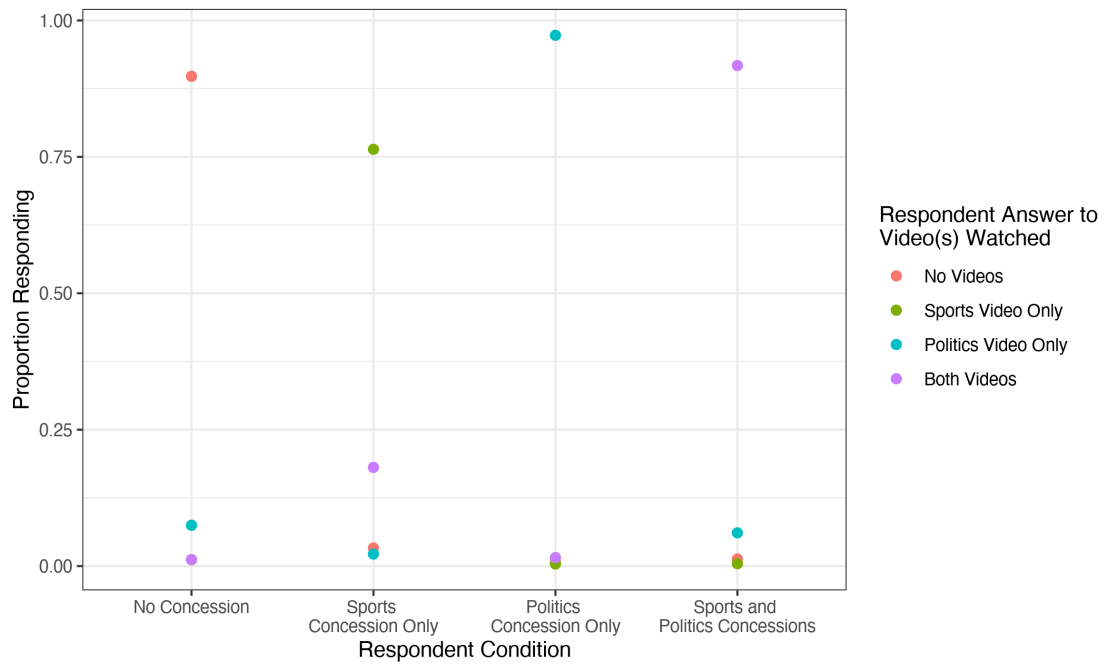


Figure 9: Percent Responses by Condition

Appendix 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