

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

Alex Tolkin\*

August 18, 2023

## Abstract

After the 2020 US presidential election, many of Donald Trump’s supporters blamed his loss on failures in the election process. Why did some of Trump’s supporters accept their candidate’s defeat, while others viewed it as illegitimate? I examine the influence of legitimating rituals, regular displays that promote perceptions that a competition was conducted fairly. Building on social learning theory, I propose a theory for how legitimating rituals in even ostensibly apolitical competitions influence perceptions of whether political competitions were conducted fairly. I apply this to the influence of watching team sports on perceptions of whether elections are conducted fairly and test the theory in two studies. In the first study I use a nationally representative panel from before and after the 2020 election to examine changes in beliefs about the election. I find that people who watched team sports more increased their perceptions that the election was conducted fairly, relative to those who watched team sports less. This relationship is driven by reactions of Trump supporters to the election. While their perceptions of fairness decreased after Trump’s electoral defeat, perceptions among Trump supporters who watched more team sports decreased significantly less. In the second study, I test whether legitimating rituals in sports cause people to view political competitions as more legitimate. Using a preregistered survey experiment, I find that watching a sports post-game conference where the loser concedes defeat increases perception that an unrelated election loss was fair. I conclude by discussing the implications of these findings not only for studies of election legitimacy, but on studies of the influence of “apolitical” entertainment media on political beliefs.

---

\*Ph.D. Candidate, Annenberg School of Communication, University of Pennsylvania, [atolkin@upenn.edu](mailto:atolkin@upenn.edu). Thank you to Rachel Hulvey, Yph Lelkes, Michelle Margolis, and Diana Mutz for their comments on earlier drafts of this paper

# 1 Introduction

Central to the idea of democracy is that electoral losers peacefully accept their defeats. Absent this willing (albeit unhappy) acceptance of electoral loss, governments are forced to use coercive force to induce compliance (Tyler 2006). If electoral losers do not believe in the legitimacy of an election, democracies risk instability and potentially a violent struggle for power (Anderson et al. 2005; Moehler 2009). Donald Trump's behavior after the 2020 election underscored the importance of accepting electoral defeat. After his defeat Trump claimed that the election was "stolen", launched a series of court cases attempting to overturn the result (Burns 2020), and instigated violence at the Capitol (Barry and Frenkel 2021). In past elections, supporters of the losing presidential candidate have consistently thought there were more flaws in election processes than supporters of the winning candidate (Anderson et al. 2005; Sances and Stewart 2015). However, after the 2020 election this gap was larger than in past elections. Since 2000, when Gallup began asking about perceptions of fairness after the elections, 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).

In this paper I examine the influence of legitimating rituals, regular displays of public behavior that are an expected part of competition which promote a belief that the competition was conducted fairly. American election campaigns have regular events or symbols that serve to reinforce the idea that elections were conducted fairly. For example, during the campaign there are debates between opposing candidates who shake hands at the end and acknowledge the competition as civil. At the end of an election the defeated candidate gives a concession speech, congratulating his or her opponent. In other competitions such as sports, there are similar rituals. Teams shake hands or

exchange hugs with their opponents, give post-game press conferences acknowledging their defeat, and peacefully accept their losses.

Many legitimating rituals in the American election process have recently been abandoned. Most notably, Donald Trump refused to concede after he lost the 2020 election (Wooley and Peters 2021). In the 2016 presidential debates, he and Hillary Clinton refused to shake hands, the first time that had happened since regularly scheduled televised debates began in the 1970s (Waxman 2016). In the 2024 election, Trump has suggested he will skip multiple if not all debates (Fortinsky 2023). In contrast to traditional election coverage which emphasized the democratic virtues of the election process (Hershey 1992), hosts on Fox News and other conservative media outlets argued that the election was “stolen” from Trump (Peters and Robertson 2023).

The decline of legitimating rituals in American politics underscores the importance of understanding the role of legitimating rituals that people view in other contexts. In this study I examine how watching team sports, where there is a clear losing side who accepts their loss peacefully, promotes greater acceptance of election losses. In America, sports are an incredibly popular form of televised entertainment. 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). Sports feature a variety of rituals that promote a narrative that the superior team won fair and square (Sage 1998). Does watching these rituals in sports influence perceptions of political competition as well?

I use social learning theory as a framework to understand how watching team sports teaches people how to respond to losses, including election losses. Social learning theory has been applied to understand how media consumption influences affect, beliefs, and behavior. It establishes four requirements for people to learn from media. I argue that watching team sports satisfies these

requirements, and therefore likely influences perceptions of other contests as well. I then perform two studies to 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 team sports moderated reactions to the election outcome. After examining changes in perceptions of election legitimacy, I test whether legitimating rituals specifically cause changes in whether people believe an election loss was legitimate. I use a preregistered survey experiment to expose people to legitimating messages in both sports and politics, comparing the effect of each on perceptions that an election loss was fair.

My results indicate that people who watched team sports more increased their perceptions of how legitimate the 2020 election would be compared to those who watched team sports less. This pattern was due to reactions of the losers to the election. In aggregate, Trump voters' perceptions of election fairness dropped after their election loss. However, Trump supporters who watched more team sports dropped significantly less. The experimental results indicate that viewing legitimating rituals in both politics and sports were both effective at increasing perception that an election loss was the result of a fair process. Combined, the two studies indicate election losers in 2020 who watched more sports with legitimating rituals were less likely to attribute their loss to failures of the election process, and legitimating rituals in sports cause people to believe that election losses were the result of fair processes.

## **2 Legitimizing Ritual and Social Learning**

Why have Americans historically considered the winner to be legitimately elected, even if their preferred candidate lost? One factor is experience with democracy. Comparative studies of nascent

versus established democracies have found that people in more established democracies are more willing to accept election losses (Anderson and Mendes 2006). In the United States, people who know more about elections (Norris, Garnett and Grömping 2020) or who live in a “battleground” state where they are exposed to more campaigning (Wolak 2014), are more likely to consider the campaign process to be fair.

Classic work on legitimacy argued that observing the behavior of politicians and “the rituals surrounding their selection and accession to office” (Easton 1975, p. 446) creates durable support for the political system, independent of which politician wins. Despite this claim, the nature and effectiveness of such rituals has received little theoretical development or empirical testing. I define legitimating rituals as behaviors which participants in contests engage in, and which reinforce beliefs in the integrity of the process. Such 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 in victory or defeat, and other similar actions. In electoral competition, examples of legitimating rituals include behavior such as debates with one’s opponents where the candidates show respect for one another, concession speeches where the defeated candidate acknowledges their loss and congratulates their opponent, or speeches affirming the importance of adhering to democratic principles.

The effect of these behaviors on perceptions of elections has received little attention, potentially because they were assumed to be a stable feature of the American political landscape. 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. 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). The authors hypothesized that respondents in

the control condition assumed that a defeated politician would concede, so one of the intended manipulations had no effect. However, with the decline in legitimating rituals in contemporary American politics, such assumptions 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 conceded (Pennycook and Rand 2021).

How might people learn from legitimating rituals in sports about how to respond to election losses? 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 (Gibson 2004). By observing "role models" and attempting to emulate their behavior, people can learn the appropriate way to react to situations (such as disappointing losses). Social learning theory has been applied to understand how people's beliefs, affect, and behavior are influenced by those they observe not just in real-life, but also in mass media (Bandura 2002; Singhal et al. 2004).

Social learning theory suggests that four requirements must be satisfied to learn from mediated others. First, one must observe the behavior of the model (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 real-world situation one faces (translation); and fourth, one must be motivated to follow the behavior of the model when the appropriate situation arises (motivation). In the case of reactions to political losses, legitimating rituals in elections satisfy these requirements to teach partisans how to react to election losses. Supporters of a politician observe the legitimating rituals that transpire over the course of a campaign and are motivated to emulate the behavior of the politician in reaction to the election; namely, respecting the outcome and respecting the opposing candidate despite political differences.

A key part of social learning is applying what one observes to novel situations. With the recent decline of legitimating rituals in the political realm, the prevalence of such rituals in other, seemingly apolitical forms of media, could help fill in the gap. Narratives in sports promote the idea that winners deserve their victories (Goldman and Papson 1998; Sage 1998). In contrast to other genres of entertainment television, where consumption is divided along party lines, sports are equally popular across parties. Sixty-four percent of Democrats, sixty-two percent of Republicans, and fifty-nine percent of Independents say they are sports fans (Consult 2021). Advertising data tracking viewership corroborates survey self-reports on the popularity of sports in the United States. More than a third of television advertising views occur during sports games (Crupi 2021). In 2022, of the top 100 most watched television broadcasts, 94 out of the top 100 were coverage of team sports (Crupi 2023).

Sports teams regularly perform a variety of legitimating rituals to indicate 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 some clearly defined level of access to talk to players and coaches after a match (Kraft 2021; Moritz, Siemsen and Kremer 2014). Not only is media access regulated, but 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 (e.g. Koreen 2023; McDaniel 2023). Similar efforts to promote beliefs that games are fair have existed since sports leagues were first created, in an attempt to attract and retain an audience (Thorn 2011).

People are motivated to emulate the behavior of sports stars. Professional athletes are a classic example of “role models” whom others want to copy. In a survey of children’s role models, professional athletes were the second most common type of figure mentioned after family members (Foundation 2000). Some of the clearest evidence of ordinary people emulating the behavior of athletes comes from the popularity of athletes in advertising campaigns. Athlete endorsements produce increased sales of the endorsed product, especially after the athlete wins a major match (Elberse and Verleun 2012). Because athletes influence consumer behavior, many top athletes earn more from endorsement deals than from their salaries even if the endorsed product has nothing to do with the athlete’s sport (Coombs and Harker 2022).

While it is difficult to determine precisely to what extent people remember legitimating rituals in sports, sports leagues appear to be highly successful at convincing viewers that the outcomes of games are fair. Despite stereotypes of fans griping about referees, majorities of fans in every sport approve of referee performance, with avid fans expressing even stronger approval (Affairs 2005; Silverman 2021). The reactions of fans to sports losses also demonstrate the ability of fans to accept frustrating losses. 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).

In summary, the requirements for observation, motivation, and retention are met for people to learn from sports how to react to losses. People who watch team sports regularly view legitimating rituals, seek to emulate the behavior of their favored teams or athletes, and believe that sports matches are fair. However, whether they can translate the lessons from watching sports into the realm of reacting to political losses is less clear.

Would legitimating rituals in sports also increase perceptions of election fairness? A variety



of evidence suggests that they would. When evaluating the processes that led to a policy, “good loser messages” endorsing the fairness of a process make people believe the policy was created using a fair procedure. Respondents in Norway and Sweden whose policy position was defeated nonetheless perceived the decision-making process more favorably than those who did not receive good loser messages (Esaiaasson, Arnesen and Werner 2023). Notably, and to the surprise of the authors, a generic message about the importance of accepting defeat in a democracy proved to be as effective as a specific statement about the fairness of the process that led to a policy outcome. The effectiveness of generic messages about democracy demonstrates that general beliefs about decision-making in a democracy can influence people’s reactions to the outcomes of specific political contests. Furthermore, people’s beliefs about specific policies are linked to ideas related to other concepts that they are more familiar with. For example, someone who believes that health care should work similarly to social security is more likely to believe that everyone should have equal coverage, while someone who believes health care should work similarly to automobile repair is more likely to believe that individuals should be able to choose their level of coverage and costs (Schlesinger and Lau 2000). In this case, attitudes about a topic many people find complex or confusing (the United States health care system) are interpreted by thinking about other topics which most people understand better (social security or automobile repair). People may similarly connect beliefs about elections to other contests they are familiar with, such as sports. A final piece of evidence that people can translate lessons from other domains to influence beliefs about elections comes from studies of conspiratorial thinking. People who are more likely to believe in conspiracy theories are more likely to believe that election processes are unfair, across multiple elections (Edelson et al. 2017; Enders et al. 2021). It seems likely that other general beliefs, such as the appropriate way to react to a loss, would influence perceptions of the fairness of an election.

The existing findings on beliefs about democracy on perceptions of procedural fairness in policymaking, use of metaphors to think about policies, and influence of general conspiratorial thinking on perceptions of election legitimacy, all suggest that people can form generalized beliefs about contests which they apply to beliefs about specific elections. Watching team sports, with frequent legitimating rituals to suggest that contests are conducted fairly, would likely promote such generalized beliefs.

### **3 Theoretical Prediction and Empirical Strategy**

Based on the social learning model, I predict that observing legitimating rituals in sports cause people to be more willing to believe that election losses were the result of fair competition. In sports, people observe frequent rituals which promote the idea that competitions are fair and the appropriate way to react to defeats is through accepting losses. These rituals are conducted by figures who are liked and whose behavior influences those watching. The rituals are effective within the context of sports. Evidence from perceptions of fairness in policy formation, the usage of metaphorical thinking when evaluating policies, and the role of general beliefs on perceptions of elections, all suggest that people can translate learning from sports to a political context.

I test the theory that watching legitimating rituals in team sports promotes acceptance of election losses in two studies. In the first study, I use an observational approach to examine how sports fans react to electoral defeat relative to non-sports fans. I use measures of perceived fairness of the election process from before and after the 2020 election to compare how attitudes towards election legitimacy changed over time. This approach using the same group of people before and after the election controls for any factors, measured or unmeasured, which have a stable influence on per-

ceptions of fairness. I test whether people who watch more sports increased perceptions of fairness more than those who watch less sports, especially for those who supported the losing candidate.

In the second study, I use a preregistered survey experiment to directly test the effect of viewing legitimating rituals. In this experiment, all respondents learn about an election where their preferred side lost. Respondents are exposed to legitimating rituals in sports and politics. I test the effectiveness of the legitimating ritual in sports relative to legitimating ritual in politics or no ritual at all. Combined, these two studies show a real-world demonstration of the relationship between watching sports and changes in perceptions of legitimacy observed during the 2020 US presidential election. Additionally, they show strong causal evidence that watching legitimating rituals that are common in sports causes people to be less likely to attribute election losses to procedural unfairness.

## **4 Study 1: How did Sports Fans React to the 2020 Election?**

This study examines the relationship between watching team sports and perceptions of the 2020 US presidential election. The 2020 election marked a notable departure from standard messaging about an election, as Trump made numerous statements arguing that his loss was due to severe flaws in the electoral process. By contrast, losers in sports accept their losses, and sports fans observe their teams voluntarily accept defeats which they portray as legitimate. Based on my application of social learning theory, I predict that these rituals influence how sports fans react to political defeat. I expect that those who watch more team sports are less likely to turn to explanations that the election was stolen or that they lost illegitimately than people who watch less team sports.

## 4.1 Hypotheses

Applying my overall prediction that seeing legitimating rituals in team sports causes people to be more accepting of election losses to the 2020 election, I present two hypotheses. First, I assume that people who watch more sports will see more legitimating rituals in sports. This means I expect that people who watch more team sports will increase perceptions that the election was conducted fairly, relative to people who watch less team sports.

$H_{1.1}$ : Watching team sports will positively moderate the change in legitimacy pre- to post-election

Second, I expect that this relationship will be particularly strong for those who lost in 2020. Sports broadcasts have messages to the losers that make their defeat easier to accept as legitimate. Such legitimating messages were largely absent in the 2020 election among Donald Trump and his supporters, the group who experienced defeat. In the case of the 2020 election, I hypothesize that relationship between sports watching and changes in perceptions of fairness will be strongest among people who supported Trump's election bid.

$H_{1.2}$ : Watching team sports will more positively moderate the change in perceived election fairness pre- to post-election more strongly among those who supported Trump

## 4.2 Study Design, Data, Measures

Data comes from a set of nationally representative panel data collected by Amerispeak.<sup>1</sup> Respondents were recruited using address-based random sampling. Sports watching was recorded in the April 2021 wave. Vote intention was recorded in October 2020, with respondents saying who they

---

<sup>1</sup>Demographics of panel respondents relative to United States population averages in appendix A

planned to vote for in the upcoming election. Perceptions of election processes were measured in 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. Measuring perceptions both before and after the election enables me to test how perceptions of the fairness of electoral processes changed in response to the results of the election.

To measure perceptions of whether the election was fair, I used a five-item index tapping belief in a set of reasons why the election would be/was conducted fairly or unfairly. Each question was measured with a four-point Likert scale, from “Very Likely” to “Not at all Likely”. Items in this index did not correlate well together ( $\alpha$  .42 before the election,  $\alpha$  .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 measure sports watching, I used a list-frequency measure (de Vreese and Neijens 2016) asking how frequently a respondent watched each of the five most popular team sports in America (football, baseball, basketball, hockey, soccer) when that sport was in season. Response options on the five-point scale ranged from “several times a week or more” to “never”. Watching each of the five team sports was strongly positively correlated with watching each of the others, forming an index with an  $\alpha$  of .75. To test the relationship between watching team sports and changes in perceptions of election fairness, I use a fixed-effect panel regression model with individual and wave 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 only measured at one point in time and a fixed effect approach controls for time-invariant predictors, I examine the interaction between the wave variable and the sports watching variable. This represents the over-time variation in the relationship between sports watching and perceptions of election fairness. In other words, the interaction represents how beliefs about the election changed based on the level of watching team sports. For ease of interpretation, respondents' levels of watching team sports and perceptions of election fairness were re-scaled so that both variables had a mean of 0 and a standard deviation of 1.

To test Hypothesis 1.1, that people who watch team sports more will increase perceptions of the fairness of the election more than those who watch team sports less, I regress perceptions of election fairness on the interaction between sports watching and the wave dummy variable. I also include the wave dummy to remove over-time change from unmeasured factors that affect all members of the sample equally.

To test Hypothesis 1.2, that the relationship between watching sports and changes in perceptions of election fairness will be stronger among supporters of the loser of the election, I regress perceptions of election fairness on the triple interaction between the wave variable, vote intention for Trump in the pre-election wave, and team sports watching. This model also includes the wave dummy, the interaction between the wave variable and sports watching, and the interaction between the wave dummy and Trump vote intention. Those variables represent respectively the influence of factors which affect all members of the sample equally, the influence of sports watching which affects all members of the sample, and the influence of Trump support. The triple interaction of interest therefore represents the difference in the relationship of sports watching on changes in perceptions of election fairness for Trump supporters versus the relationship of sports watching on changes in perceptions of election fairness for non-Trump supporters. A positive value would

Table 1: Change in Election Legitimacy

	Model 1	Model 2
Wave	0.151 (0.020) ***	0.558 (0.021) ***
Team Sports Watching x Wave	0.064 (0.020) **	-0.002 (0.021)
Trump Voter x Wave		-1.059 (0.035) ***
Team Sports Watching x Trump Voter x Wave		0.100 (0.038) **
N	2,625	2,625

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

All models use within-person fixed effects; variables are measured in standard deviations

indicate that Trump supporters who watched more team sports changed more positively compared to Trump supporters who watched less team sports, relative to how non-Trump supporters who watched more team sports changed compared to non-Trump supporters who watched less team sports. In other words, it examines how much stronger the relationship between watching team sports and changes in perceived election fairness is for losers compared to winners.

### 4.3 Results

I present my results in Table 1. The first model in the table tests hypothesis 1.1, that watching team sports positively moderates changes in perceptions of election fairness, by regressing change in perceived election fairness on the wave variable plus the interaction between watching team sports and the wave variable. The second model in the table tests hypothesis 1.2 by regressing the change in perceived election fairness on the wave variable plus the interactions between watching team sports and the wave dummy; Trump vote intention and the wave dummy; and watching team sports, Trump vote intention, and the wave dummy. The final triple interaction is the variable of interest for hypothesis 1.2 - that the relationship between watching sports and changes in perceptions of election fairness are stronger among losers.

Model 1 in Table 1 supports hypothesis 1.1. Watching more team sports predicted an increase in perceptions that the election was conducted fairly ( $p < .01$ ). For each additional standard deviation of sports watching, individuals increased their perceptions that the election was conducted fairly pre- to post- election by .06 standard deviations.

When the interaction Watching x Trump Voter x Wave is included, Team Sports Watching x Wave is no longer statistically significant. However, the triple interaction is significant at  $p < .01$ . This indicates that the relationship observed in Model 1 was driven entirely by the beliefs of those whose candidate lost the election. Trump supporters who watched more sports changed less negatively than their counterparts, while sports watching did not moderate the changes in perceptions of election fairness for those who did not support Trump. For Trump voters, each additional standard deviation of sports watching was associated with a .1 standard deviation increase in perceptions the election was conducted fairly from pre- to post-election.

For easier interpretation of the regression results, I graphically present the relationship between sports watching and changes in perceptions of election fairness by wave in figures 1 and 2. To make the figures easier to parse, rather than treating watching team sports as continuous as I do in Table 1, I examine patterns among two groups: Those in the top third of watching team sports (“high” sports watchers) and those in the bottom third of watching team sports (“low” sports watchers). I show the average perceptions of the fairness of election processes, among high and low sports watchers, before and after the 2020 election.

Figure 1 visualizes the relationship shown in model 1. As the figure demonstrates, consistent with past work on the influence of elections on perceptions of election legitimacy (Esaiaasson 2011), in aggregate respondents increased their perceptions of how fair they thought the election was conducted after the election. However, people who watched more team sports increased more than



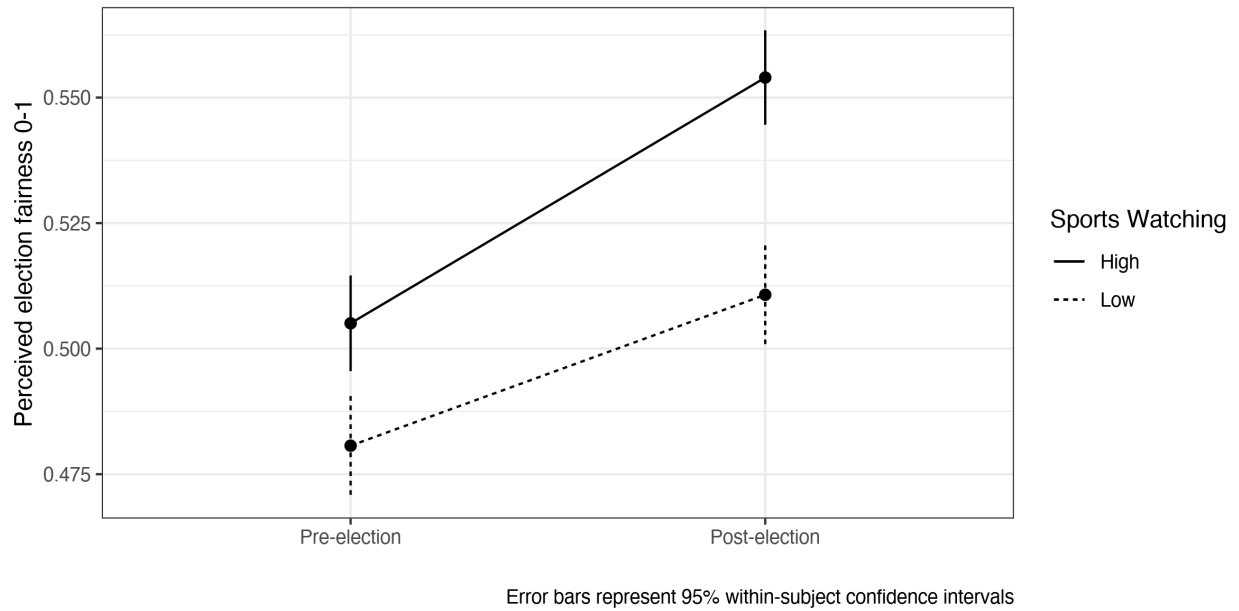


Figure 1: Perceptions of 2020 Election Fairness by Wave and Sports Watching

those who watched less team sports.

Figure 2 visualizes the relationship shown in model 2. Once again, the findings on changes in perceptions of election fairness are consistent with past work showing that election losers decrease their confidence in the election process while election winners increase their confidence in the election process (Daniller and Mutz 2019; Sances and Stewart 2015). For respondents whose candidate won the election, perceptions about the election changed equivalently among those who watched more sports as those who watched less sports. For respondents whose candidate lost the election however, while all respondents decreased confidence in the fairness of the election those who watched more team sports decreased less than those who watched less team sports.

These results indicate that watching team sports moderated changes in perceptions of the fairness of the 2020 election, with those watching more team sports changing more positively. This suggests that those who watch more team sports are less likely to believe they lost an electoral competition due to fraud, and more likely to accept that their loss was legitimate.

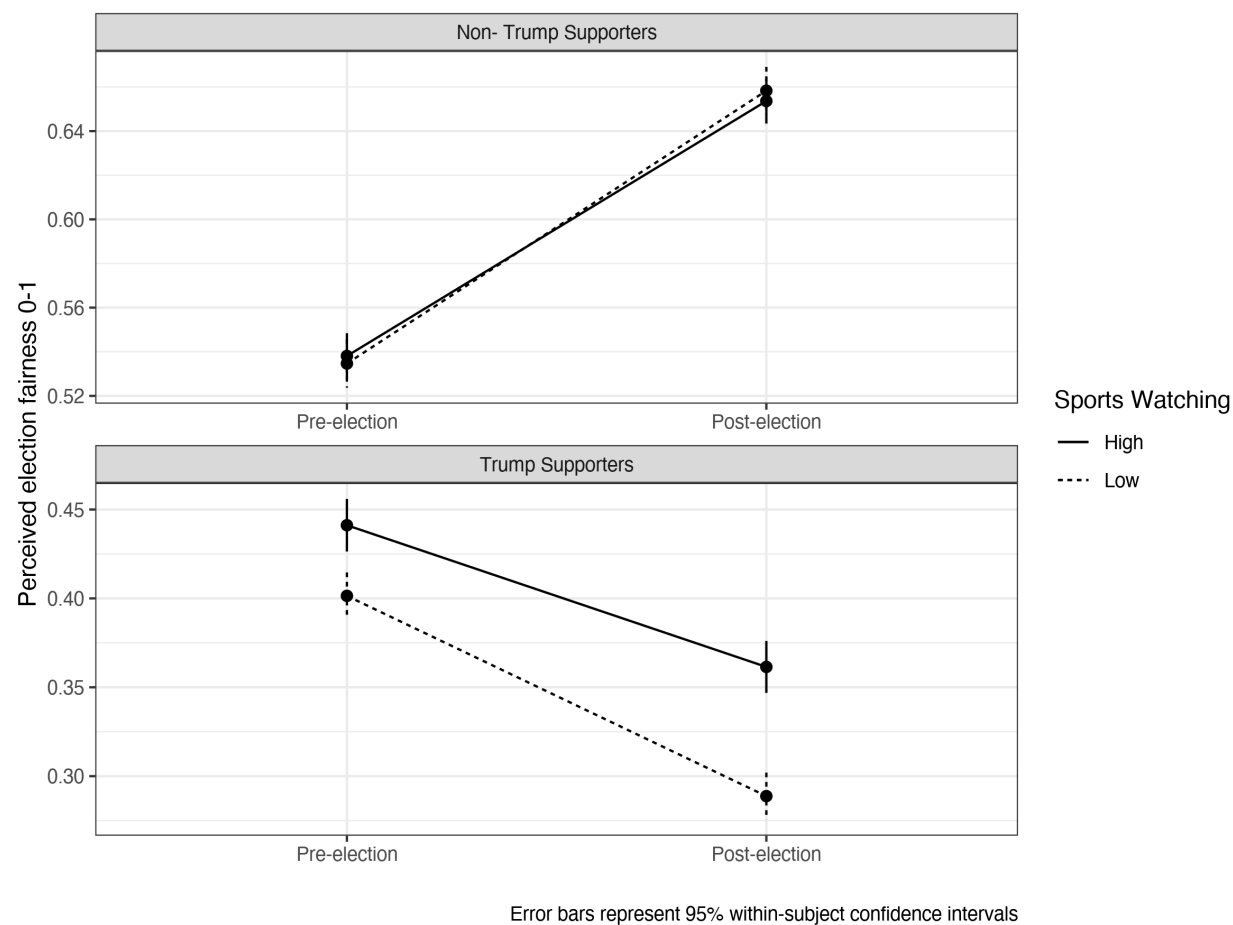


Figure 2: Perceptions of 2020 Election Fairness by Wave, Candidate, and Sports Watching

How substantively large are these changes? It is helpful to consider the interaction between Wave and Trump voting in model 2. Trump voters on average dropped approximately one standard deviation in their perceptions of the election from pre- to post- election, relative to non-Trump voters. A one standard deviation increase in sports watching was associated with approximately .1 standard deviations increase in perceptions of election fairness. This indicates that watching sports does not erase the frustration of losing an election, but those who watch more team sports are less likely to turn to beliefs that an election was rigged to explain their loss.

One potential concern is that the relationship between watching team sports and changes in perception of election fairness are due to some other variable. Sports watching is not randomly assigned. While surveying the same set of respondents before and after the election removes the influence of any variables whose influence is constant over time, there may be other variable(s) which both predict a respondent's level of sports watching and which moderate changes in perceptions of the election pre- to post-election. In Appendix C I use the method of (Cinelli and Hazlett 2020) to establish bounds on how significant a potential variable would have to be to substantively change my results. To select variables to test I used demographics which past work has found predict differing levels of sports watching (Norman 2018; Wann et al. 2001), and interacted these demographics with the wave variable to see which predicted not only differences in sports watching, but changes in perceptions to election fairness. For both models 1 and 2, a variable more than twice as significant as any tested would be required to negate the relationship between watching team sports and changing to increase perceptions of election legitimacy. These findings suggest that the results are fairly robust to model selection.

The results of this study show that people who watched more team sports changed their perceptions of fairness more positively in reaction to the 2020 election. This was due to Trump supporters.

While Trump supporters lowered their perceptions of whether the election was fair, watching more team sports predicted a less severe drop. However, this study does not test the proposed mechanism; namely, that it was legitimating rituals in sports that accounts for the observed pattern. My second study addresses this limitation, by experimentally testing the influence of legitimating rituals on beliefs about elections.

## **5 Study 2: Does Watching Legitimizing Rituals in Sports Influence Political Beliefs?**

In this study, I directly manipulate the legitimating rituals that respondents are exposed to and test how they influence perceptions of the fairness of elections. Specifically, 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 politics, where the defeated candidate publicly acknowledges his or her defeat. Concession speeches from politicians have historically followed a rhetorical pattern which emphasizes re-framing losses and mitigating disappointment from supporters who may have invested large amounts of time, effort, and emotion into a campaign. Instead of focusing on lamenting their defeat, 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). Similar themes of praising supporters and affirming their hard work are common in post-election messages from losing candidates on Twitter (Mirer and Bode 2015). Post-defeat press conferences among coaches and players 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 of acknowledging the winner, identifying positives to take from the loss, and commiserating with the disappointment of 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.

## 5.1 Hypotheses

My overall prediction, that seeing legitimating rituals in team sports causes people to be more accepting of election losses, implies two hypotheses in this study on concession speeches. First, I predict that seeing a politician's concession speech will increase the perception that the politician's loss was legitimate. If a legitimating ritual associated with a competition does not boost perceptions the competition was conducted fairly, it seems unlikely that a legitimating ritual associated with a different competition would. Beliefs that an election was illegitimate are often post-hoc rationalizations for an election loss to cope with disappointment in the outcome (Daniller and Mutz 2019; Esaiasson 2011). I expect that the defeated politician's statement acknowledging their loss will cause supporters of that politician to be less likely to turn to explanations that the election was fraudulent.

$H_{2.1}$ : People who see a politician they support concede are more likely to believe that loss was fair

Second, and crucially, I predict that seeing a concession speech in sports will also increase

belief that a political loss was fair. Sports concessions feature the losing side accepting defeat, acknowledging their opponent, and showing a commitment to following the rules of the game. If legitimating rituals in sports influence general beliefs about reactions to losses, then a legitimating ritual in sports should increase beliefs that an unrelated competition was fair.

$H_{2,2}$ : People who see a sports figure concede are more likely to consider an election loss to be fair

## 5.2 Study Design, Data, Measures

To test the influence of watching concession speeches on perceptions of election processes, I ran a preregistered online survey experiment on a sample of 1,012 United States respondents recruited from the survey provider Forthright.<sup>2</sup> 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 legitimate 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).

The design was a 2x2 experiment, with the two factors being assignment to watch a sports concession speech and assignment to watch a political concession speech. Therefore, there were four total conditions (sports concession and political concession, sports concession, political concession, no concessions), with roughly equal numbers of respondents in each.

The study procedure was as follows: First, all respondents answered an initial set of questions to measure covariates and verify their ability to hear audio and see video. Respondents in the sports concession condition then read about a recent basketball game and watched a video of part of the

---

<sup>2</sup>Preregistration available at [https://aspredicted.org/blind.php?x=1TD\\_KY4](https://aspredicted.org/blind.php?x=1TD_KY4)

defeated coach's post-game press conference.<sup>3</sup> Then all respondents read a description of two candidates and those candidates' policy positions. The candidates were fictitious, but respondents were told they were the politicians who ran for mayor of Jacksonville Florida in the most recent mayoral election. Respondents were asked to select which candidate they preferred. To make respondents more attached to their preferred candidate, all respondents were asked to write about why they selected their preferred candidate. After selecting their preferred candidate and justifying their choice, all respondents were then told their preferred candidate had lost in a close election, and the other candidate was the winner.

Once all respondents had been told their preferred candidate had suffered an electoral defeat, respondents in the political concession condition watched a video of a politician give a concession speech. They were told this was the concession speech of the candidate they had just expressed support for. To bolster external validity, this was an edited version of the real concession speech given by candidate Daniel Davis after he lost the most recent election for mayor of Jacksonville.<sup>4</sup> Parts of Davis's speech were manipulated to fit the description of the election read by participants. Snippets of sound were generated using AI voice-cloning program Coqui.ai based on Davis's vocal patterns. The name of the actual election winner who Davis congratulated in his speech was changed to be the name of the candidate respondents were told won the election. All respondents then answered questions about whether they believed the Jacksonville mayoral election was legitimate. To test whether the manipulations were successful, respondents answered questions asking which candidate won the Jacksonville election and which video(s) they watched. Finally, respondents were debriefed about the real Jacksonville mayoral election.<sup>5</sup>

---

<sup>3</sup>Unedited video available at <https://www.youtube.com/watch?v=ahxLPIPC7vI>

<sup>4</sup>Unedited video available at [https://www.youtube.com/watch?v=YhHi\\_2AEPfM](https://www.youtube.com/watch?v=YhHi_2AEPfM)

<sup>5</sup>Respondents were also asked at the end of the survey if they had family or friends from Jacksonville, with the

Crucially, this experimental design ensures that all respondents learn about an election, select a preferred candidate, and be informed that their preferred candidate lost that election. The only differences between conditions consist of which concession speeches each respondent watched. Figures 3 and 4 show what a respondent who picked the Democratic candidate to win would see (a screen showing their candidate lost) and the video that those in the political concession condition saw (Daniel Davis's concession speech, edited to match the information respondents read about the race). Regardless of which candidate they picked, the audio in the concession speech congratulated the candidate respondents were told won the election.

To measure whether respondents viewed the electoral defeat as fair, I used an eight-item index asking 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”, with higher numbers representing increased belief the election was conducted fairly. For example, “votes were accurately counted” would be a belief the election process 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.

To analyze the experiment, I used regression with heteroskedastic-robust (HC2) standard errors (Lin 2013). I included the following pre-registered covariates: education, age, and Trump feeling thermometer. Age and education were provided as demographics by the survey company. Trump

---

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. In experimental design, removing respondents based on post-treatment variables 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.



feeling thermometer was measured at the beginning of the survey by asking respondents to rate Trump and Biden on 100-point feeling thermometers, then taking the difference between the two ratings (Trump minus Biden). Therefore, per the preregistration, perceived election legitimacy was modeled using the following equation:

$$\textit{Election Legitimacy} \sim \textit{Political Concession} + \textit{Sports Concession} + \textit{Education} + \textit{Age} + \textit{Trump Thermometer}$$

### 5.3 Results

The manipulations were successful. Respondents successfully identified the candidate they had been told won the election and remembered which video(s) they watched ( $p < .001$ ). To test my hypotheses, I compare the differences in means between the two factors, adjusted based on the covariates included in the preregistered model. To test hypothesis 2.1, I compare the mean for the pooled political concession conditions versus the pooled political no-concession conditions. Similarly, to test hypothesis 2.2, I compare the mean for the pooled sports concession conditions versus the pooled sports no-concession conditions. Figure 5 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 in the first panel and grouped by whether respondents saw the sports concession in the second panel.

Hypothesis 2.1 and hypothesis 2.2 are both supported. In line with past research on the influence of concession speeches on perceptions of legitimacy in policy formation (Esaiasson, Arnesen and Werner 2023), people who watched a defeated politician concede believed their 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 a political defeat was more legitimate ( $p < .05$ ). There was some evidence of a positive interaction between the two factors, significant at  $p < .1$  but not  $p < .05$ .

Effect sizes were calculated based on the preregistered model, including covariates. Respondents who watched a sports concession speech had perceptions of election legitimacy 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 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 elements of a political concession speech even though it was about a different topic. Consistent with past work on the surprising effectiveness of general “good loser

messages” (Esaiaasson, Arnesen and Werner 2023), the general message about being a good loser was sufficient for the sports concession to political beliefs.

## 6 Discussion

This work contributes to answering two broader questions. First, while partisans find election losses deeply upsetting (Pierce, Rogers and Snyder 2016), why do some react to electoral loss by rationalizing it as the result of an unfair or illegitimate process, while others believe their losses were fair? Existing work on the relationship between media and perceptions of elections has focused on the role of partisan media (Daniller and Mutz 2019; Grant et al. 2021) or one-time messages from notable politicians endorsing the legitimacy of an election (Clayton and Willer 2023; Wuttke, Sichart and Foos 2023). Work on advertising, including messages in ostensibly apolitical “entertainment” media, suggests that messages have short-term effects (Gerber et al. 2011; Paluck et al. 2015). Instead of examining one-time messages, my work examines repeated rituals which become generalized expectations for how competition operates.

Second, how can seemingly “apolitical” media influence political attitudes? Watching entertainment television programs affects a variety of politically-relevant attitudes such as perceptions of the criminal justice system (Mutz and Nir 2010), attitudes towards international relations (Lenart and McGraw 1989), support for capital punishment (Holbert, Shah and Kwak 2004), and belief in the possibility of economic advancement (Kim 2023). After being largely neglected as a source of political beliefs (Gift and Miner 2017) or viewed as apolitical shocks to public mood (Healy, Malhotra, and Mo 2010), recent work has found that watching sports influences a variety of political attitudes as well (e.g. Alrababa’h et al. 2021; Thorson and Serazio 2018). Yet despite their

prominence in contemporary media diet, the study of how watching sports influences United States political behavior remains in its infancy. My findings suggest that watching sports influences beliefs about proper responses to competitions. While I apply this to elections, there may be other politically relevant competitions that sports influences perceptions of as well.

There are several reasons to be optimistic about the power of legitimating rituals in sports. First, sports are broadly seen as non-political. Partisans interpret media and events through the “perceptual screen” of their party affiliation (Campbell et al. 1960; Zaller 1992). If sports are seen as non-partisan, people may be more amenable to messages which do not align with their partisan outlook. Sports are watched by large numbers of Americans of all parties (Morning Consult 2021), and people feel warmly towards others who are fans of their favorite team, even members of the opposite political party (Levendusky 2023). Even when sports networks are accused of being partisan, this does not appear to damage viewership of the network (Peterson and Munoz 2022).

Second is the sheer popularity of sports watching in the United States. Among the most prized demographic for advertisers, Americans ages 18-49, ESPN is watched more than Fox, MSNBC, and CNN combined (Schneider 2022). Broadcast networks are more popular than ESPN or cable news networks, and are equally dominated by sports programming. In terms of total hours, people spend more time watching football on the broadcast network FOX than all other programming on the network combined (Crupi 2021b). Many Americans are largely disengaged from politics (Krupnikov and Ryan 2022). Messages in sports on the importance of losing gracefully could reach Americans who pay minimal attention to political news.

There are several limitations of my studies. First, it is unclear to what extent my findings generalize to future elections. In the first study, I observe patterns of reacting to the 2020 election which are in line with my experimental findings. 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 normal legitimating rituals are followed remains to be seen. With Trump planning a 2024 presidential run however, United States elections may continue to have one or more candidates who refuse to adhere to traditional legitimating rituals. In the second study, I examine an election which respondents knew nothing about. Therefore, their attitudes about the election were likely highly malleable. The effect of sports messages may be considerably smaller if attitudes about an election are crystallized. Second, respondents saw the sports concession speech immediately 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, I only do a single treatment, which does not account for the effect of numerous treatments from years of watching sports.

In the 2023 Super Bowl, the Philadelphia Eagles suffered a devastating loss to the Kansas City Chiefs, allowing a game-losing field goal with eight seconds left in the game. The Chiefs' winning drive came after a highly disputed holding call with less than two minutes remaining. Yet despite how contentious and disappointing the Eagles' loss was, less than a minute after the game ended players from the opposing teams were hugging and amicably shaking hands. Television cameras focused on Eagles players congratulating their opponents immediately after the heartbreaking defeat. In his post-game interview, the Eagles' star quarterback re-framed the loss as a learning opportunity for the team and something that would help them play better next season (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 and that the Chiefs won fair and square, similar to the messages they see after countless other sports matches. In 2023, far more people watched that game than coverage of any political event.

## References

- Affairs, Ipsos Public. 2005. Major League Baseball Study. Technical report Ipsos Public Affairs.
- Allison, Paul. 2009. *Fixed Effects Regression Models*. Thousand Oaks, California: SAGE Publications, Inc.
- Anderson, Christopher J., André Blais, Shaun Bowler, Todd Donovan and Ola Listhaug. 2005. *Losers' Consent: Elections and Democratic Legitimacy*. New York: Oxford University Press.
- Anderson, Christopher J. and Silvia M. Mendes. 2006. "Learning to Lose: Election Outcomes, Democratic Experience and Political Protest Potential." *British Journal of Political Science* 36(1):91–111.
- Ansolabehere, Stephen and Nathaniel Persily. 2008. "Vote Fraud in the Eye of the Beholder: The Role of Public Opinion in the Challenge to Voter Identification Requirements." *Harvard Law Review* 121(7):1737–1774.
- Bandura, Albert. 1977. *Social Learning Theory*. Prentice-Hall Series in Social Learning Theory Englewood Cliffs, New Jersey: Prentice-Hall.
- Bandura, Albert. 2002. Social Cognitive Theory of Mass Communication. In *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann. Mahwah, N.J.: Lawrence Erlbaum Associates pp. 121–153.
- Barry, Dan and Sheera Frenkel. 2021. "'Be There. Will Be Wild!': Trump All but Circled the Date." *The New York Times* .
- Burns, Alexander. 2020. "Trump Attacks an Election He Is at Risk of Losing." *The New York Times* .
- Cinelli, Carlos and Chad Hazlett. 2020. "Making Sense of Sensitivity: Extending Omitted Variable Bias." *Journal of the Royal Statistical Society Series B: Statistical Methodology* 82(1):39–67.

- Clayton, Katherine and Robb Willer. 2023. "Endorsements from Republican Politicians Can Increase Confidence in U.S. Elections." *Research & Politics* 10(1):1–5.
- Consult, Morning. 2021. "National Tracking Poll #210484 April 15-19 2021."
- Coombs, W. Timothy and Jennifer L. Harker. 2022. *Strategic Sport Communication: Traditional and Transmedia Strategies for a Global Sports Market*. New York: Routledge, Taylor & Francis Group.
- Corcoran, Paul E. 1994. "Presidential Concession Speeches: The Rhetoric of Defeat." *Political Communication* 11(2):109–131.
- Crupi, Anthony. 2021. "NFL Inks 11-Year, \$105 Billion Media Rights Renewals With Partners." <https://www.sportico.com/business/media/2021/nfl-renews-tv-rights-fox-espn-nbc-cbs-1234623948/>.
- Crupi, Anthony. 2023. "2022 TV Recap: It's the NFL's World; the Rest of Us Just Live in It." <https://www.sportico.com/business/media/2023/nfl-games-account-for-82-of-100-top-tv-broadcasts-1234700381/>.
- Daniller, Andrew M and Diana C Mutz. 2019. "The Dynamics of Electoral Integrity: A Three-Election Panel Study." *Public Opinion Quarterly* 83(1):46–67.
- de Vreese, Claes H. and Peter Neijens. 2016. "Measuring Media Exposure in a Changing Communications Environment." *Communication Methods and Measures* 10(2-3):69–80.
- Easton, David. 1975. "A Re-Assessment of the Concept of Political Support." *British Journal of Political Science* 5(4):435–457.
- Edelson, Jack, Alexander Alduncin, Christopher Krewson, James A. Sieja and Joseph E. Uscinski. 2017. "The Effect of Conspiratorial Thinking and Motivated Reasoning on Belief in Election Fraud." *Political Research Quarterly* 70(4):933–946.

- Elberse, Anita and Jeroen Verleun. 2012. "The Economic Value of Celebrity Endorsements." *Journal of Advertising Research* 52(2):149–165.
- Enders, Adam M., Joseph E. Uscinski, Casey A. Klofstad, Kamal Premaratne, Michelle I. Seelig, Stefan Wuchty, Manohar N. Murthi and John R. Funchion. 2021. "The 2020 Presidential Election and Beliefs about Fraud: Continuity or Change?" *Electoral Studies* 72:102366.
- Enterline, Lynn. 2010. *Apologia in Coaches' Post-Game Rhetoric: "Listen, It's Never as Bad as You Think..."* PhD thesis Wake Forest University.
- Esaiasson, Peter. 2011. "Electoral Losers Revisited – How Citizens React to Defeat at the Ballot Box." *Electoral Studies* 30(1):102–113.
- Esaiasson, Peter, Sveinung Arnesen and Hannah Werner. 2023. "How to Be Gracious about Political Loss—The Importance of Good Loser Messages in Policy Controversies." *Comparative Political Studies* 56(5):599–624.
- Fortinsky, Sarah. 2023. "Trump 'Unlikely' to Participate in Debates, Says Adviser Jason Miller."
- Foundation, Kaiser Family. 2000. *National Survey of Kids (and Their Parents) About Famous Athletes as Role Models: Summary of Findings*. Technical report.
- Gerber, Alan S., James G. Gimpel, Donald P. Green and Daron R. Shaw. 2011. "How Large and Long-Lasting Are the Persuasive Effects of Televised Campaign Ads? Results from a Randomized Field Experiment." *American Political Science Review* 105(1):135–150.
- Gibson, Donald E. 2004. "Role Models in Career Development: New Directions for Theory and Research." *Journal of Vocational Behavior* 65(1):134–156.
- Goldman, Robert and Stephen Papson. 1998. *Nike Culture: The Sign of the Swoosh*. Thousand Oaks, California: SAGE.
- Grant, Marissa D., Alexandra Flores, Eric J. Pedersen, David K. Sherman and Leaf Van Boven. 2021. "When Election Expectations Fail: Polarized Perceptions of Election Legitimacy Increase



- with Accumulating Evidence of Election Outcomes and with Polarized Media.” *PLOS ONE* 16(12):e0259473.
- Griffin, Robert and Mayesha Quasem. 2021. Crisis of Confidence: How Election 2020 Was Different. Technical report Voter Study Group.
- Hershey, Marjorie Randon. 1992. “The Constructed Explanation: Interpreting Election Results in the 1984 Presidential Race.” *The Journal of Politics* 54(4):943–976.
- Jones, Jeffrey M. 2016. “U.S. Supreme Court Job Approval Rating Ties Record Low.” <https://news.gallup.com/poll/194057/supreme-court-job-approval-rating-ties-record-low.aspx>.
- Klein, Jeff Z. 2014. “Tracing the Origin of Handshake Lines in the N.H.L.” *The New York Times*.
- Koreen, Eric. 2023. “As Fred VanVleet’s Criticism of Referees Lingers, Raptors Must Be Accountable, Too.” <https://theathletic.com/4293843/2023/03/09/raptors-fred-vanvleet-fined-referees/>.
- Kraft, Nicole. 2021. “Sports Writers Could Ditch the ‘clown Questions’ and Do Better When It Comes to Press Conferences.” <http://theconversation.com/sports-writers-could-ditch-the-clown-questions-and-do-better-when-it-comes-to-press-conferences-162228>.
- Lewis, Jerry M. 2007. *Sports Fan Violence in North America*. Lanham, MD: Rowman & Littlefield.
- Lin, Winston. 2013. “Agnostic Notes on Regression Adjustments to Experimental Data: Reexamining Freedman’s Critique.” *The Annals of Applied Statistics* 7(1):295–318.
- Llewellyn, John Todd. 2003. Coachtalk: Good Reasons for Winning and Losing. In *Case Studies in Sport Communication*, ed. Robert S. Brown and Daniel J. O’Rourke. Westport, Connecticut: Praeger pp. 141–157.
- McDaniel, Mike. 2023. “Joey Bosa Fined After Public Criticism of Officiating in Chargers vs. Jaguars, per Report.” <https://www.si.com/nfl/2023/01/21/joey-bosa-fined-after-public-criticism-of-officiating-in-chargers-vs-jaguars-per-report>.

- Mirer, Michael L and Leticia Bode. 2015. "Tweeting in Defeat: How Candidates Concede and Claim Victory in 140 Characters." *New Media & Society* 17(3):453–469.
- Moehler, Devra C. 2009. "Critical Citizens and Submissive Subjects: Election Losers and Winners in Africa." *British Journal of Political Science* 39(2):345–366.
- Montgomery, Jacob M., Brendan Nyhan and Michelle Torres. 2018. "How Conditioning on Post-treatment Variables Can Ruin Your Experiment and What to Do about It." *American Journal of Political Science* 62(3):760–775.
- Moritz, Brent, Enno Siemsen and Mirko Kremer. 2014. "Judgmental Forecasting: Cognitive Reflection and Decision Speed." *Production and Operations Management* 23(7):1146–1160.
- Mutz, Diana C. 2021. Improving Experimental Treatments in Political Science. In *Advances in Experimental Political Science*, ed. James N. Druckman and Donald P. Green. New York, NY: Cambridge University Press pp. 219–238.
- Norman, Jim. 2018. "Football Still Americans' Favorite Sport to Watch." <https://news.gallup.com/poll/224864/football-americans-favorite-sport-watch.aspx>.
- Norris, Pippa, Holly Ann Garnett and Max Grömping. 2020. "The Paranoid Style of American Elections: Explaining Perceptions of Electoral Integrity in an Age of Populism." *Journal of Elections, Public Opinion and Parties* 30(1):105–125.
- Paluck, Elizabeth Levy, Paul Lagunes, Donald P. Green, Lynn Vavreck, Limor Peer and Robin Gomila. 2015. "Does Product Placement Change Television Viewers' Social Behavior?" *PLOS ONE* 10(9):e0138610.
- Park-Ozee, Dakota and Sharon E. Jarvis. 2021. "What Does Rigged Mean? Partisan and Widely Shared Perceptions of Threats to Elections." *American Behavioral Scientist* 65(4):587–599.
- Pennycook, Gordon and David G. Rand. 2021. "Research Note: Examining False Beliefs about

- Voter Fraud in the Wake of the 2020 Presidential Election.” *Harvard Kennedy School Misinformation Review* .
- Peters, Jeremy W. and Katie Robertson. 2023. “Fox Stars Privately Expressed Disbelief About Election Fraud Claims. ‘Crazy Stuff.’” *The New York Times* p. 1.
- Pierce, Lamar, Todd Rogers and Jason A. Snyder. 2016. “Losing Hurts: The Happiness Impact of Partisan Electoral Loss.” *Journal of Experimental Political Science* 3(1):44–59.
- Sage, George Harvey. 1998. *Power and Ideology in American Sport: A Critical Perspective*. 2nd ed. Champaign, Illinois: Human Kinetics.
- Sances, Michael W. and Charles Stewart. 2015. “Partisanship and Confidence in the Vote Count: Evidence from U.S. National Elections since 2000.” *Electoral Studies* 40:176–188.
- Schlesinger, Mark and Richard R. Lau. 2000. “The Meaning and Measure of Policy Metaphors.” *American Political Science Review* 94(3):611–626.
- Seifert, Kevin. 2016. “Do NFL Players, Coaches Face Fines for Criticizing Officials?” [https://www.espn.com/blog/nflnation/post/\\_id/219774/do-nfl-players-coaches-face-fines-for-criticizing-officials](https://www.espn.com/blog/nflnation/post/_id/219774/do-nfl-players-coaches-face-fines-for-criticizing-officials).
- Silverman, Alex. 2021. “Referees Score High Marks With U.S. Sports Fans in State of Officiating Survey.” <https://morningconsult.com/2021/05/17/state-of-sports-officiating/>.
- Singhal, Arvind, Michael J. Cody, Everett M. Rogers and Miguel Sabido, eds. 2004. *Entertainment-Education and Social Change: History, Research, and Practice*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Thorn, John. 2011. *Baseball in the Garden of Eden*. New York: Simon & Schuster.
- Tyler, Tom R. 2006. “Psychological Perspectives on Legitimacy and Legitimation.” *Annual Review of Psychology* 57(1):375–400.

- Vonnahme, Greg and Beth Miller. 2013. "Candidate Cues and Voter Confidence in American Elections." *Journal of Elections, Public Opinion & Parties* 23(2):223–239.
- Wann, Daniel L., Merrill J. Melnick, Gordon W. Russell and Dale G. Pease. 2001. *Sport Fans: The Psychology and Social Impact of Spectators*. New York: Routledge.
- Waxman, Olivia B. 2016. "A Brief History of Handshakes at Presidential Debates." <https://time.com/4538640/handshake-presidential-debates/>.
- Wolak, Jennifer. 2014. "How Campaigns Promote the Legitimacy of Elections." *Electoral Studies* 34:205–215.
- Wooley, John T. and Gerhard Peters. 2021. "Presidential Election Concession Speeches and Messages." <https://www.presidency.ucsb.edu/documents/presidential-documents-archive-guidebook/presidential-campaigns-debates-and-endorsements-2>.
- Wuttke, Alexander, Florian Sichart and Florian Foos. 2023. "Null Effects of Pro-Democracy Speeches by U.S. Republicans in the Aftermath of January 6th." *Journal of Experimental Political Science* pp. 1–15.

## **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.<sup>6</sup> 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**

---

<sup>6</sup>1% of the survey was administered in Spanish according to user preferences

Table 2: Respondent Demographics Relative to Population Benchmarks

	Panel Respondents	US Population, Feb 2020
<b>Income</b>		
Less than \$30,000	20.1	17.5
\$30,000 to \$74,999	40.4	33.1
\$75,000 to \$124,999	24.3	24.6
More than \$125,000	15.2	24.9
<b>Age</b>		
18 - 34	17.3	29.3
35 - 49	26.6	24.3
50 - 64	29.0	24.9
65+	27.1	21.5
<b>Race/Ethnicity</b>		
Non-Hispanic White	72.9	62.8
Non-Hispanic Black	7.8	11.9
Hispanic	12.3	16.7
Non-Hispanic Asian/Pacific Islander	2.9	6.4
Non-Hispanic Others	4.1	2.2
<b>Education Status</b>		
Less than High School	2.5	9.8
High School or Equivalent	16.3	28.2
Some College/Associate Degree	37.7	27.7
Bachelor's Degree	24.3	21.8
Graduate Degree	19.1	21.4
<b>Household Ownership</b>		
Owner Occupied	70.2	67.5
Renter Occupied/Other	29.8	32.5
<b>Children in Household</b>		
With 1+ Under 18 Years	27.1	33.1
Without Children Under 18	72.9	66.9
<b>Marital Status</b>		
Currently Married	54.9	52.6
Separated/Divorced/Widowed/Single	45.1	47.4
<b>Sex</b>		
Male	48.9	48.3
Female	50.9	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.

## **Appendix B Panel Question Wording**

### **B.1 Perceived Election Fairness**

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.2 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 Sensitivity Analysis

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 for model 1 was:

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

Model 2 was the same, but restricted to those who planned on voting for Trump.

**Model 1 Outcome: Election Fairness**

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D   \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$
<i>wave:team sports</i>	0.012	0.005	2.623	0.3%	5%	1.3%
df = 2562	<i>Bound (1x wave:black): <math>R^2_{Y \sim Z   \mathbf{X}, D} = 2.8\%</math>, <math>R^2_{D \sim Z   \mathbf{X}} = 1\%</math></i>					

**Model 2 Outcome: Election Fairness**

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D   \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$
<i>wave:team sports</i>	0.012	0.007	1.694	0.3%	5.3%	0%
df = 972	<i>Bound (1x wave:female): <math>R^2_{Y \sim Z   \mathbf{X}, D} = 3.1\%</math>, <math>R^2_{D \sim Z   \mathbf{X}} = 2.1\%</math></i>					



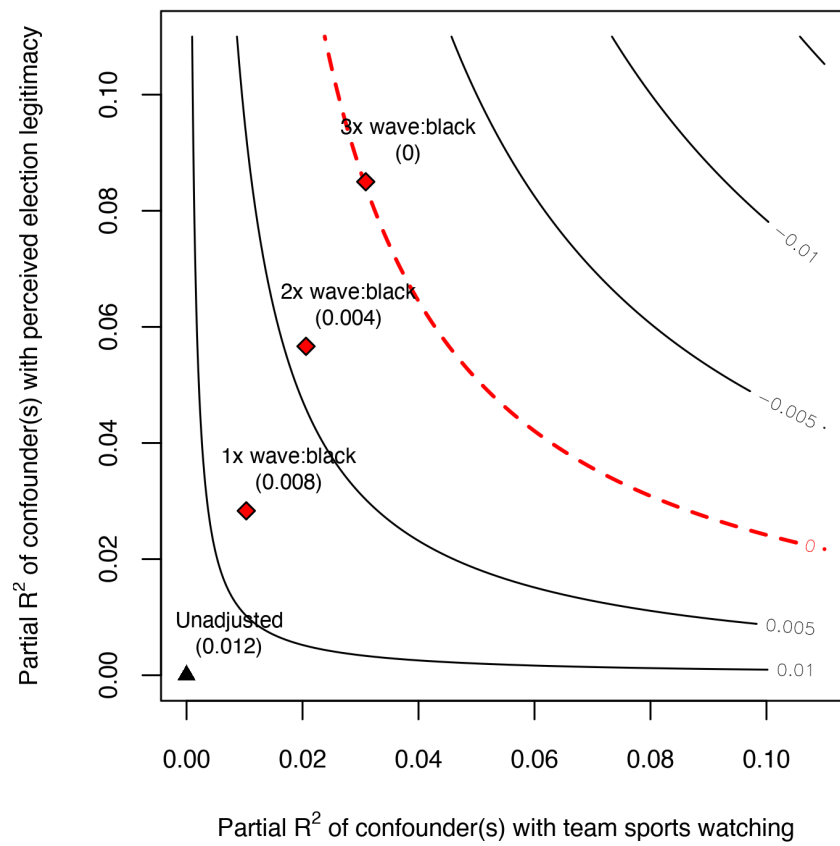


Figure 3: Model 1 Sensitivity

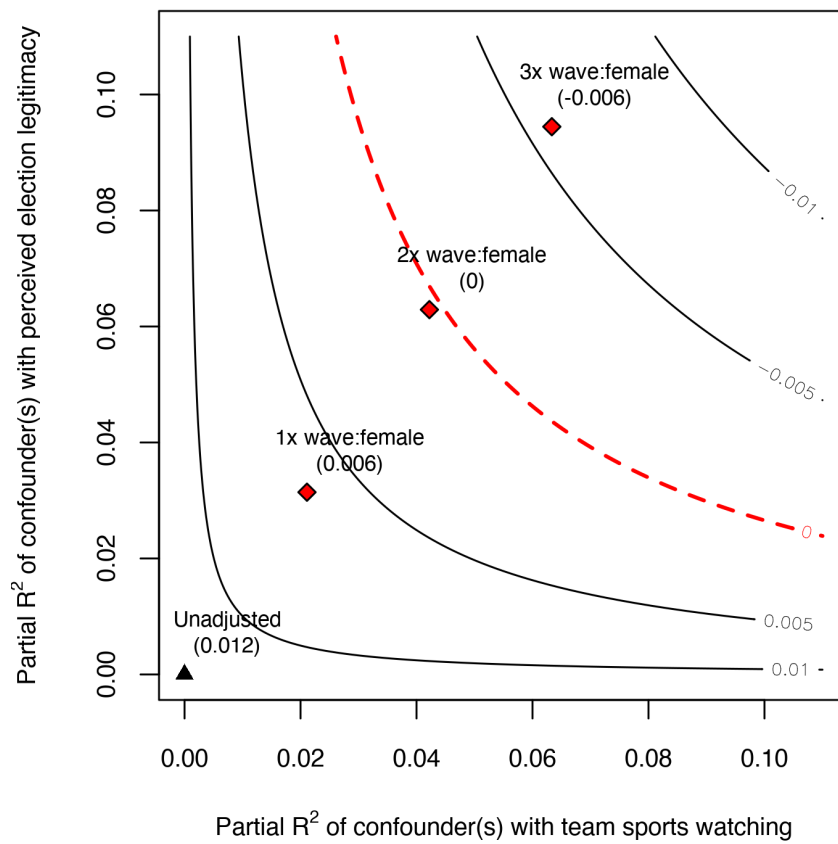


Figure 4: Model 2 Sensitivity (Trump Supporters)

## **Appendix D Text of Experimental Treatments**

### **D.1 Political concession speech**

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.

### **D.2 Sports concession speech**

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 E Experimental Study Question Wording**

### **E.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]”

### **E.2 Candidate Selection**

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

### **E.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 F    Attention Checks

“Who won the recent Jacksonville Mayoral Election?”

Table 3: Percent Responses by Winner Name

	Thomas Dobson	David Talley
Tomas Dobson (Republican)	89.4	7.3
David Talley (Democrat)	5.1	85.3
Jeff Marshall (Republican)	3.5	2.8
Jacob Bridges (Democrat)	1.9	4.6

“Which videos did you watch?”

Table 4: Percent Responses by Condition

	No Videos
I did not watch any videos	94.2Z A video about sports A video about politics A video about sports and a video