The Political Relevance of Irrelevant Events

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Short title: The Political Relevance of Irrelevant Events

Abstract

Do events irrelevant to politics affect citizens' political opinions? A growing literature suggests that such events (e.g., athletic competitions, shark attacks) do in fact shape political preferences. We present an experiment that largely replicates a widely noted irrelevant event effect. Specifically, we find that the outcome of a sporting event (i.e., a football game) affects presidential approval and likely does so by affecting individuals' moods. We also show that the effect is short-lived.

Keywords: public opinion, preferences, mood, irrelevant events

Supplementary material for this article is available in the appendix in the online edition.

Replication files are available in the JOP Data Archive on Dataverse (https://urldefense.proofpoint.com/v2/url?u=http-

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Do events irrelevant to politics affect citizens' political opinions? A growing body of work suggests that they do: daily climate fluctuations, shark attacks, random lotteries, and athletic competitions can shape citizens' political preferences (e.g., Achen and Bartels 2016; Healy, Malhotra, and Mo 2010; Huber, Hill, and Lenz 2012). For example, Healy, Malhotra, and Mo (2010) report that, for each win by one's favored basketball team during the 2009 National Collegiate Athletic Association (NCAA) basketball tournament (in the third and fourth rounds), approval for President Obama increased by 2.3 percentage points. The increase was 5 percentage points among those closely following the tournament. The authors describe their findings as "evidence that [political] decisions are influenced by irrelevant events that have nothing to do with the competence or effectiveness of incumbent government" (2010, 12806-12807).

We build on Healy, Malhotra, and Mo's results, in three ways. First, we attempt to replicate their basic finding on a different sporting event: a major college football game. We do so with an experimental design that facilitates causal inference by random assignment to a survey before or after the game.² Second, we offer suggestive evidence about the mechanism (i.e., mood) by which the irrelevant event influences political attitudes. Third, we introduce two additional measures: a "relevant" attitude connected to the event and over-time items to assess the longevity of irrelevant event effects.

Experiment

Studying the effects of irrelevant events on political opinions entails identifying a politically irrelevant event (e.g., a sporting event) experienced by individuals that causes them to

¹ This conclusion (Healy, Malhotra, and Mo 2010) is based, in part, on observational data about how respondents react to college basketball games. They also include an experimental condition that corrected for the event effect by explicitly reminding respondents of the game. Additionally, Healy, Malhotra, and Mo include a football study using over-time aggregate data that has been debated (Fowler and Montagnes 2015a,b; Healy, Malhotra, and Mo 2015).

² We use an experiment to study the causal impact of the irrelevant event. This differs from the Healy, Malhotra, and Mo (2010) experiment, which focused on correcting the irrelevant event effect. We do not study corrections; our study is, in many ways, an experimental replication of their observational data on basketball games.

shift their political attitudes (e.g., winning/losing teams leads to more/less support for the incumbent). The event on which we focus is the 2015 College Football Playoff National Championship game, played on January 12th, between The Ohio State University (OSU) and the University of Oregon (UO). OSU won the game 42-20, and thus, OSU is the "winning school" and UO is the "losing school." Our samples came from students at the respective universities who, even if not football fans, were very likely affected by the event. Specifically, we accessed each school's public student directories and randomly selected approximately 1,800 students from each school to generate our sample.

Our precise design involved randomly assigning students from each school (winning OSU and losing UO) to receive an invitation (and reminders) to complete a survey *before* or *after* the game. We sent the initial before-game invitations on January 10th, 2015, and told students they must complete the survey by January 12th. We sent an analogous invitation to the after-game groups the day after the game and told these respondents that they had to complete the (same) survey by January 15th. The e-mailed invitations asked individuals to participate in a survey aimed at understanding "the political and social opinions of college students," thereby avoiding alerting respondents that the survey had a connection to the football game; prior research suggests if such a conscious connection is made, the irrelevant effect disappears (e.g., Healy, Malhotra, and Mo 2010, 12806; Schwarz and Clore 1983; Druckman 2015). We discuss sampling specifics, response rates, and other implementation details in the online appendix.

To analyze the impact of the game on attitudes, we focus on comparisons within each school (the before-game against after-game groups). Due to random assignment to the before- or after-game condition, any differences in our key outcome measures between the two groups very likely stem from experiencing the event (i.e., the game). Our main outcome measure is a standard presidential approval question (measured on a 7-point fully-labeled scale with higher

scores indicating increased approval). This measure is analogous to the outcome used by Healy, Malhotra, and Mo (2010) in their examination of college basketball wins.

We also sought to explore the possible mechanism by which the irrelevant event affects attitudes. We follow a large body of research by focusing on mood, which has been shown to have various types of unintended effects (e.g., Schwarz and Clore 1983; 2003). In our case, the logic is that the event (i.e., the game) generates either a positive or negative mood that then spreads to (e.g., contaminates) unrelated status-quo evaluations. In other words, a win causes a positive mood which, in turn, leads people to view the current state of the world – such as assessments of the sitting President – in a relatively positive light (Healy, Malhotra, and Mo 2010, 12804; Huber, Hill, and Lenz 2012, 731; Bassi 2013). To assess whether mood is a possible mechanism, we included an abbreviated version of the Positive and Negative Affect Schedule (PANAS) (e.g., Watson and Clark 1994; Bassi 2013); the scale included four items that reflect a positive mood (enthusiastic, proud, interested, and elated) and nine items for negative mood (afraid, worried, anxious, angry, bitter, hatred, contempt, resentful, sad). These items asked participants to indicate, on 5-point scales, how much they are feeling these specific things (see the online appendix for a discussion of why we used mood rather than discrete emotions).

We also included a potentially relevant outcome measure: satisfaction with one's university, measured on a 7-point fully labeled scale, with higher scores indicating increased satisfaction (see Mixon and Treviño 2005; see the online appendix for additional measures included). Finally, we re-contacted respondents roughly one-week after their initial participation to re-measure our main outcome questions and assess whether any effects of the game endure.

Our design leads to straightforward expectations about how the game may influence the variables we measured. Recall that our focus is on the randomly assigned before- and after-game groups within schools. We predict that comparisons between the before- and after-game OSU

(winning team) groups should show increased positive mood, decreased negative mood, increased approval, and increased school satisfaction. We expect the reverse trend for Oregon (losing team). We lack expectations for the duration measures as past work on over-time opinion dynamics offers mixed results (e.g., Lecheler and De Vreese 2016).

Results

We present the results for presidential approval in Table 1. The columns report the mean scores for each condition, with asterisks indicating statistical significance (using one-tailed tests as we have directional predictions). We find clear evidence that the irrelevant event influenced opinions for both the OSU and UO respondents. When it comes to presidential approval, we see a significant increase in support from 4.18 to 4.63 (on the 7-point scale), due to the game, among OSU respondents. We also see a similarly sized significant decrease (from 4.56 to 4.12) for UO respondents. (The before-game OSU-UO difference reflects that the UO sample was more Democratic: 64.50% of the UO sample versus 44.57% of the OSU sample.) We also find substantial effects on satisfaction with one's university with OSU respondents increasing in satisfaction from 5.35 to 5.93, and UO respondents becoming substantially less satisfied (from 5.24 to 4.30). Events appear to be able to affect opinions irrelevant to one domain (politics) while also influencing attitudes in a relevant domain.

[Table 1 About Here]

Mood

The posited mechanism by which irrelevant event effects work is a change in mood in either a positive or negative direction. This shift is contagious, affecting (or contaminating) seemingly irrelevant opinions (Huber, Hill, and Lenz 2012, 731). We used the described PANAS measures to create aggregate (average) measures of positive and negative mood (see Bassi 2013,

22). The results, presented in Table 2, show clear mood effects. When it comes to positive mood, we observe a sizable increase from the before- to after-game OSU groups, moving from 3.03 to 3.49 (on a 5-point scale); on the flip side, we see a decline from 2.78 to 2.43 in positive mood among the UO respondents (both changes are statistically significant). When it comes to negative mood, we see a significant increase among the UO respondents from 1.80 to 2.16. The change for OSU respondents is not significant but moves in the anticipated direction (e.g., fewer negative feelings after-game). The design of our experiment precludes us from directly documenting mood as the mediating factor (see Bullock and Ha 2011) – a better approach would entail a within-subject design. In addition, the measures we use for mood rely on self-reports with measurement error. More indirect techniques of measuring mood would help to confirm the findings with self-reported mood indicators. That said, the data clearly demonstrate the possibility of the proposed relationship (also see Bassi 2013).

[Table 2 About Here]

Durability

The final question we address is whether the effects from the game endure one week later (also see Egan and Mullin 2012, 804; Healy, Malhotra, and Mo 2010, 12805). Recall we conducted a follow-up survey one week after the initial survey, re-measuring presidential approval (see the online appendix for further discussion of our durability results). We limit our analyses of over-time effects *only* to those who responded at time 2 (T2); otherwise, we would be comparing distinct time 1 (T1) and T2 samples (i.e., the T2 sample would be a subset of T1).⁴

Figure 1 shows that the irrelevant event effect apparent at T1 disappears a week later.

Consider that at T2, the OSU before-game group *had experienced the victory*. If the victory had a

³ The alphas for both measures are .85, although the inter-item covariance is notably higher for the positive terms.

⁴ The results presented in this section are robust to the use of multiple imputation techniques that allow us to simulate responses of all time 1 participants. See the online appendix for more details.

lasting effect, the average presidential approval score for the OSU before-game group should increase at T2, approaching that of the after-game OSU group. This is not what we see. Instead, the OSU before-game group shows insignificant (negative) change over time, moving from a 4.22 average to a 3.98. Experiencing the victory did not cause a change, a week later, in the before-game OSU group. In contrast, the after-game OSU group significantly declines from a 4.93 average to 4.03, suggesting that the after-game impact disappeared.

[Figure 1 About Here]

We see the same pattern of results for UO. The before-game UO group slightly declines from 4.74 to 4.6; the fact that this difference is nowhere near significance suggests that the loss had no detectable effect at T2. Conversely, the after-game UO group, which demonstrated a drop in approval after the initial loss, increased to an average score of 4.57 (approaching the beforegame T1 score). This change falls just short of conventional levels of significance (at p=0.052 for a one-tailed test). The impact of the loss appears to have faded. Even though we studied one of the most watched sporting events with clearly affected samples, the irrelevant effects seem more akin to brief blips than enduring changes. This, in some sense, is not surprising given mood is the likely mechanism. Mood effects are likely short-lived and probably changed by T2.

Our results accentuate the need for future research on the durability of irrelevant effects (also see Egan and Mullin 2012). It remains unclear just how often – and with what events, attitudes, populations, times, and contexts – irrelevant event effects are so short-lived that they have minimal consequence for opinion formation. Consider our results in tandem with Healy, Malhotra, and Mo's (2010) football study (see note 1). Those authors find that effects from football games last about 10 days, but their data involve games that occur around elections. In

⁵ That the scores for both before- and after-game groups converge at time 2 is evidence that, within-schools, the experimental groups are comparable.

the context of an election, voters may have arrived at their vote choice when the effect of the game was still strong; their data and our results cannot speak to this possibility.

Discussion

Our results show that irrelevant events *can* have political consequences (see the online appendix for various supportive analysis and robustness checks). That said, caution should be taken in generalizing our results. In some sense, our sample size was two – two schools around one event, rather than multiple schools around various games. Moreover, in many ways, we maximized the likelihood of finding an effect: we focused on a major event (one of the most watched sporting events of the year), a sample of respondents akin to strong fans (even if students are not football fans, the campus atmosphere and school reaction is unavoidable), a young sample where movement in political attitudes is more likely given that their political opinions are not crystalized, and a time when there were no notable political debates or elections.

The study of irrelevant event effects in politics is an emerging area of inquiry, and going forward, we urge scholars to systematize it so as to avoid haphazardly choosing events. This entails clearly defining what events are in fact "irrelevant," sampling from a population of such events, and then identifying the conditions under which they affect political attitudes and behaviors. Relatedly, the presence of irrelevant event effects suggests that mood can play a salient role in opinion formation processes. This suggests a need to determine when mood effects occur, for how long, and with what impact, relative to other ingredients of preference formation.

Table 1: Effects on Ohio State (Winning Team) and Oregon (Losing Team) Respondents

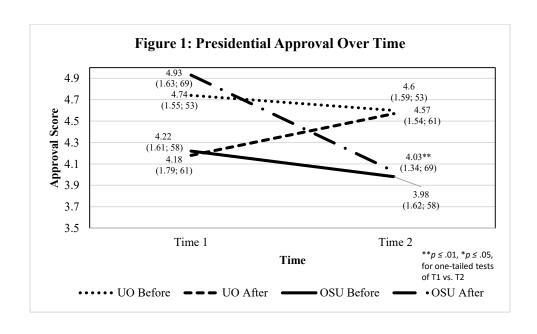
	Before-Game	After-Game			
Ohio State (Winning Team) Respondents					
Presidential approval	4.18	4.63*			
(7-point scale)	(std. dev. = 1.61; N =	(1.84; 109)			
	87)				
Satisfaction with	5.35	5.93**			
university	(1.69; 84)	(1.63; 104)			
(7-point scale)					
Oregon (Losing Team) Respondents					
Presidential approval	4.56	4.12*			
(7-point scale)	(1.50; 105)	(1.78; 113)			
Satisfaction with	5.24	4.30**			
university	(1.56; 102)	(1.75; 107)			
(7-point scale)					

^{**} $p \le .01$, * $p \le .05$, for one-tailed tests.

Table 2: Effects on Mood

	Before-Game Positive Mood	After-Game Positive Mood	Before-Game Negative Mood	After-Game Negative Mood
OSU	3.03	3.49**	1.82	1.71
	(1.03; 83)	(1.00; 103)	(.70; 83)	(.68; 103)
UO	2.78	2.43**	1.80	2.16**
	(1.00; 98)	(.89; 107)	(.72; 98)	(.79; 107)

^{**} $p \le .01$, * $p \le .05$, for one-tailed tests.



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References

- Achen, Chris H., and Larry M. Bartels. 2016. *Democracy for Realists: Why Elections Do Not Produce Responsive Government*. Princeton, NJ: Princeton University Press.
- Bassi, Anna. 2013. "Weather, Mood, and Voting." Social Science Research Network. http://papers.ssrn.com/abstract=2273189.
- Bullock, John G., and Shang E. Ha. 2011. "Mediation Analysis Is Harder Than It Looks." In *Cambridge Handbook of Experimental Political Science*, edited by James N. Druckman, Donald P. Green, James H. Kuklinski, and Arthur Lupia, 508–21. New York: Cambridge University Press.
- Druckman, James N. 2015. "Eliminating the Local Warming Effect." *Nature Climate Change* 5 (3): 176–77.
- Egan, Patrick J., and Megan Mullin. 2012. "Turning Personal Experience into Political Attitudes." *Journal of Politics* 74 (3): 796–809.
- Fowler, Anthony, and B. Pablo Montagnes. 2015a. "College Football, Elections, and False-Positive Results in Observational Research." *Proceedings of the National Academy of Sciences* 112 (45): 13800-04.

- Fowler, Anthony, and B. Pablo Montagnes. 2015b. "Reply to Healy et al." *Proceedings of the National Academy of Sciences* 112 (45): E6592.
- Healy, Andrew J., Neil Malhotra, and Cecilia Hyunjung Mo. 2010. "Irrelevant Events Affect Voters' Evaluations of Government Performance." *Proceedings of the National Academy of Sciences* 107 (29): 12804–9.
- Healy, Andrew J., and Neil Malhotra, and Cecilia Hyunjung Mo. 2015. "Determining False-positives Requires Considering the Totality of the Evidence." *Proceedings of the National Academy of Sciences* 112 (45): E6591.
- Huber, Gregory A., Seth J. Hill, and Gabriel S. Lenz. 2012. "Sources of Bias in Retrospective Decision Making." *American Political Science Review* 106 (4): 720–41.
- Lecheler, Sophie, and Claes H. De Vreese. 2016 "How Long Do News Framing Effects Last? A Systematic Review of Longitudinal Studies" In *Communication Yearbook* 40, edited by Elisia L. Cohen, 3-33. New York: Routledge.
- Mixon, Franklin G., and Len J. Treviño. 2005. "From Kickoff to Commencement." *Economics of Education Review* 24 (1): 97–102.
- Schwarz, Norbert, and Gerald L. Clore. 1983. "Mood, Misattribution, and Judgments of Well-Being." *Journal of Personality and Social Psychology* 45 (3): 513-23.
- Schwarz, Norbert, and Gerald L. Clore. 2003. "Mood as Information: 20 Years Later." *Psychological Inquiry* 14(3/4): 296-303.
- Watson, David, and Lee A. Clark. 1994. "Emotions, Moods, Traits, and Temperaments." In *The Nature of Emotion: Fundamental Questions*, edited by Paul Ekman and Richard J. Davidson, 1 edition, 89–93. New York: Oxford University Press.

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