

Football and Public Opinion: A Partial Replication and Extension*

Ethan C. Busby and James N. Druckman

Abstract

Do events irrelevant to politics, such as the weather and sporting events, affect political opinions? A growing experimental literature suggests that such events can matter. However, extant experimental evidence may over-state irrelevant event effects; this could occur if these studies happen to focus on particular scenarios where irrelevant event effects are likely to occur. One way to address this possibility is through replication, which is what we do. Specifically, we replicate an experimental study that showed the outcome of a college football game can influence presidential approval. Our results partially replicate the previous study and suggest the impact is constrained to a limited set of outcome variables. The findings accentuate the need for scholars to identify the conditions under which irrelevant effects occur. While the effects clearly can occur, there relevance to politics remains unclear.

Keywords: irrelevant events, replication, public opinion, sports and politics

Over the last decade, scholars of political opinion formation and voting have debated whether events irrelevant to politics influence attitudes and behaviors. Two noteworthy studies, that use observational data, report that college sport victories and shark attacks can influence incumbents' vote shares (Achen and Bartels, 2016; Healy et al., 2010). Others contest these two results, claiming that they are false positives (Fowler and Montagnes, 2015; Fowler and Hall, n.d.; although see Healy et al., 2015). Numerous experimental studies demonstrate that irrelevant events, such as the weather, sporting events, and random lotteries, can influence political

*We thank Jake Druckman, Adam Howat, Elizabeth Meehan, Jacob Rothschild, and Richard Shafranek for research assistance. We also thank Daniel Biggers, Anthony Fowler, Seth Hill, Adam Howat, and Neil Malhotra for excellent advice. The data, code, and additional materials required to replicate all analyses in this article are available at the *Journal of Experimental Political Science* Dataverse within the Harvard Dataverse Network, at: doi:10.7910/DVN/BKVLFI. Financial support was from internal University funds. Neither author (nor a relative) received significant financial support over the last three years, or had a position with a relevant organization. No other party had a right to review the paper prior to circulation.

Department of Political Science, Northwestern University, Scott Hall, 601 University Place, Evanston, IL 60208, United States, e-mail: busby@u.northwestern.edu, druckman@northwestern.edu

 \odot The Experimental Research Section of the American Political Science Association 2017

opinions and/or behaviors (e.g., Healy et al., 2010, study 2; Bagues and Esteve-Volart, 2016; Bassi, 2017; Busby et al., 2017; Huber et al., 2012).

Yet, these experiments have not been replicated on different samples or with different outcomes. We seek to replicate one of these studies (i.e., Busby et al., 2017). Such replication attempts can indicate if the aggregate literature over-states the presence of irrelevant event effects. This could occur from happenstance if particular conditions likely to generate irrelevant event effects happen to be met in extant studies.¹ To be clear, this is not a critique of existing papers, which faithfully report careful studies that establish the existence of irrelevant event effects (i.e., researchers did not actively set up studies most likely to produce effects). Rather, replication with a different event, sample, and time is a way to move the literature forward to assess robustness and the conditions under which irrelevant event effects occur.

THE ORIGINAL STUDY

A "politically irrelevant" event is one that occurs outside the control of elected officials (Healy and Malhotra, 2013). The event can affect individuals' moods. Affected individuals then may unknowingly use their moods as information when they evaluate a politician or office holder: a positive (negative) mood leads to a favorable (unfavorable) assessment (Bassi, 2017; Huber et al., 2012, 731).

Busby et al. (2017) offer evidence of such a process in their study of the 2015 College Football Playoff National Championship game, where The Ohio State University beat the University of Oregon. The authors drew a random sample of students from each school and then randomly assigned them to receive a survey, advertised as a study of the "social, economic, and political attitudes of college students," either two days before or after the game.

They find that, relative to comparable students surveyed before the game, students from the winning school (OSU) who were surveyed after the game reported a more positive mood, more satisfaction with their school, and more approval of President Obama. Oregon students displayed the opposite dynamics. Thus, the football game, which was beyond political control, ostensibly affected moods and then presidential approval.² The effect on approval, however, dissipated one week later. Busby et al. (2017) provide causal evidence of a short-term irrelevant event effect but are far from definitive. The authors conclude (2017, 349) that "caution should be taken in generalizing our results. In some sense, our sample size was two – two schools around one event..."

¹Another possibility is publication bias such that only significant results enter the published literature (Brown et al. 2017; Franco et al. 2014).

²Busby et al. (2017) also find that the after-game respondents for the winning team displayed a significant increase in their evaluations of the economy and were significantly more likely to post how they felt on social media. There were no effects on these variables for the losing team respondents.

OUR REPLICATION

We utilized the same design and procedure as Busby et al. (2017), focusing this time on the 2016 College Football National Championship game. The game took place at 8:30 PM Eastern time on January 11, 2016, and pitted the University of Alabama against Clemson University. Alabama won the game 45–40.³ We randomly selected Alabama and Clemson students to participate; we then randomly assigned them to receive a before- or after-game invitation to participate in the survey. There thus, in essence, are four cross-sections of data: the before- and after-groups for Alabama and Clemson. We launched the before-game survey on January 9th, closing it at 5:00 PM Eastern time on January 11th; we launched the after-game survey on January 12th, closing it at 5:00 PM Eastern Time on January 14th. This was the time 1 (T1) survey. We sent one reminder, and launched a time 2 (T2) follow-up eight days later. The T2 follow-up asked those who participated at T1 to complete a survey with near identical items to the initial survey.

Like Busby et al. (2017), we measured: presidential approval, satisfaction with one's university, positive and negative mood, evaluation of the economy, and willingness to post on social media.⁴ To explore the boundaries of irrelevant effects, we also asked how favorably respondents viewed Pope Francis and how satisfied they were with their lives. The Pope Francis item tests whether effects extend to notable figures beyond the President, while the life satisfaction item comes from classic mood-as-information studies (e.g., Schwarz and Clore, 1983, 2003). Finally, we asked respondents how important their university was to their identity since college sport events can influence identity (Cialdini et al., 1976). We provide additional sample, procedural, and question wording details in the Supplementary Appendix.

RESULTS

We assume that, for each school, the before- and after-game survey groups are equivalent, on average (since we randomly assigned participation to the before- or after-game survey). Therefore, any average differences between the groups for each school (we do not compare across school) would indicate an effect of the game. In the Supplementary Appendix, we present demographics and balance checks that suggest comparability of the before- and after- groups.⁵ As mentioned, we invited those who responded at T1 to participate in an (identical) survey eight days later.

³The 2016 game differed from the 2015 game in that it had a smaller viewership (23 percent drop), involved two Southern schools from distinct conferences, and occurred during the start of the 2016 Presidential primary election.

⁴These latter two measures appear in Busby et al.'s (2017) appendix.

⁵Alabama and Clemson had respectively beaten Michigan State University and the University of Oklahoma in semi-final games. We collected analogous experimental data from the semi-final losing schools. We find no impact of the game on any political attitudes for these schools; this suggests that any changes observed among Clemson and Alabama respondents come from the game and not other

We use these data to assess whether any effects found at T1 endure (e.g., do other factors/events eliminate the immediate irrelevant event effect?).⁶

We present the results in Table 1, which shows the before- and after-game mean scores (and the differences between the means) on each outcome variable for each school. The results replicate Busby et al.'s (2017) findings on presidential approval, university satisfaction, and mood only for the losing school Clemson. We find no effects for Alabama respondents, in contrast to Busby et al.'s (2017) finding that the game affected respondents from both schools. Moreover, even for Clemson, we find no significant differences on any other outcome measure, suggesting that the impact is confined to a limited set of attitudes.⁷

We also explored whether the effects sustained one week later. We focus exclusively on the two significant Clemson effects (we did not measure mood in the T2 survey), since those are the effects that might last. In Table 2, we present the T1 and T2 means (and the differences between them) for the Clemson beforeand after-game respondents. Note the T1 means in Table 2 do not match the T1 means in Table 1 since in the former we look only at those who responded at T2.⁸ We find, as did Busby et al. (2017), that the impact of the game was fleeting. Both after-game T2 scores significantly increased to resemble those of the before-game group, suggesting that people reverted back to attitudes unaffected by the game (also see Pierce et al., 2016).⁹ In the Supplementary Appendix, we provide a host of robustness checks for our T1 and our over-time results (including accounting for non-response at T2).

CONCLUSION

The first generation of experimental studies of irrelevant event effects have clearly established that such effects can occur. Our results echo this reality as we replicated

national political events that occurred between the before- and after-game administrations. Discussion of the semi-final loser data are presented in the Supplementary Appendix.

⁶Our T1 response rates for the before-game group and after-game group for Clemson and Alabama, respectively, were 11.4% (103/903), 11.3% (99/880), 10.4% (104/1000), 7.8% (78/997). The T2 response rates for before-game group and after-game group for Clemson and Alabama, respectively, were 61.2% (63/103), 60.6% (60/99), 65.4% (68/104), 51.3% (40/78). In the Supplementary Appendix, we discuss variations in response rates.

⁷See the Supplementary Appendix for exploratory evidence on how mood may be a mediator, and evidence on the direct effect of positive mood on posting to social media.

⁸If we look at the T1 means for only those who responded at T2 (as in Table 2), the differences are still significant (for presidential approval, at the 0.1 level). We see an increase in the T1 presidential approval score, absolutely, between all who responded at T1 and only those who responded at T2 (i.e., compare Table 2 to Table 1). The stems from Democrats being significantly more likely to respond at T2. This could possibly reflect increased interest in responding to a survey in light of the State of the Union that occurred during the after-game data collection. Even if so, this would not confound our treatment (see the Supplementary Appendix).

 9 Busby et al. (2017) find that the winning team satisfaction result maintained (but the losing team dissatisfaction at T1 seemed to disappear, as we find).

	Clemson (los	sing team) respond	Alabama (winning team) respondents			
	Before-game	After-game	Difference (after-before)	Before-game	After-game	Difference (after-before)
Presidential approval (7-point scale)	3.83 (std. dev. = 1.80; N = 103)	3.35 (2.13; 99)	- 0.47**	3.64 (1.94; 104)	3.83 (1.96; 78)	0.19
Satisfaction with university (7-point scale)	5.89 (1.53; 102)	5.43 (1.63; 98)	-0.46^{**}	5.50 (1.59; 103)	5.58 (1.59; 78)	0.08
Positive Mood (5-point scale)	3.28 (0.89; 101)	3.01 (0.82; 93)	- 0.26**	2.95 (0.96; 101)	2.97 (0.92; 75)	0.03
Negative Mood (5-point scale)	1.65 (0.60; 100)	1.99 (0.71; 92)	0.34***	1.63 (0.60; 100)	1.62 (0.56; 77)	-0.01
Evaluation of Economy (5-point scale)	2.83 (1.04; 103)	2.95 (1.10; 99)	-0.11	2.67 (0.91; 104)	2.85 (1.06; 78)	0.17
Pope Favorability (4-point scale)	3.10 (0.71; 103)	3.10 (0.76; 99)	0.00	3.02 (0.72; 104)	3.01 (0.70; 77)	-0.01
Life Satisfaction (10-point scale)	7.25 (1.88; 101)	7.38 (1.69; 96)	0.13	7.04 (1.89; 102)	7.39 (1.84; 77)	0.35
School Identity Importance (5-point scale)	3.62 (1.16; 102)	3.60 (1.04; 98)	-0.02	3.23 (1.24; 103)	3.27 (1.10; 78)	0.04
Likelihood of Posting Feelings on Social Media (5-point scale)	1.99 (1.29; 101)	1.77 (1.17; 93)	- 0.22	1.92 (1.18; 102)	2.10 (1.19; 77)	0.18

Table 1
Effects on Clemson (Losing Team) and Alabama (Winning Team) Respondents

 $***p \leq 0.01, **p \leq 0.05, *p \leq 0.10$ for one-tailed tests. Slight differences between the values in the difference column and the subtraction of the before and after-game groups are due to rounding.

Clemson Over-Time Effects										
	Clemson (losing team) respondents									
	Before-game			After-game						
	T1	T2	Difference (T2–T1)	T1	T2	Difference (T2–T1)				
Presidential approval (7-point scale)	4.14 (1.85; 63)	4.02 (1.81; 63)	- 0.13	3.67 (2.15; 60)	4.22 (1.76; 60)	0.55***				
Satisfaction with university (7-point scale)	5.82 (1.62; 62)	5.97 (1.32; 62)	0.15	5.10 (1.73; 60)	5.77 (1.16; 60)	0.67***				

Table 2

 $***p \le 0.01, **p \le 0.05, *p \le 0.10$ for one-tailed tests.

one such effect. On the other hand, we failed to replicate the effect for the winning team and found that the effects appear to be transitory and confined to selected outcome variables. This should not be taken as definitive evidence that the extant literature over-states the extent of irrelevant events; yet, it serves as a (cautionary) prompt to the next generation of work.

The obvious question is "under what conditions to irrelevant event effects occur?" Our read of the research thus far suggests they occur more often when people are surprised by the event (e.g., Eldar et al. 2016, 15–16; Healy et al. 2010, 12806).¹⁰ are able to (unconsciously) attribute their mood to the object under evaluation (e.g., the president, their university, but not the economy or the Pope) (Schwarz and Clore, 2003, 299), and are not motivated to systematically assess information beyond mood. It may be that existing evidence inadvertently happens to meet these and other unspecified conditions. Replications under different circumstances is one way to move the literature forward to isolate conditions and ultimately assess whether politically irrelevant events occur regularly and widely matter for politics.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit https://doi.org/10. 1017/XPS.2017.22

REFERENCES

Achen, C. H., and Bartels, L. M. 2016. Democracy for Realists: Why Elections Do Not Produce Responsive Government. Princeton, New Jersey: Princeton University Press.

¹⁰In our case, Alabama was favored so the victory was not a surprise, but Clemson fans may have expected victory, despite pre-game odds, since they were ranked first and undefeated.

- Bagues, M., and Esteve-Volart, B. 2016. "Politicians' Luck of the Draw: Evidence from the Spanish Christmas Lottery." *Journal of Political Economy*, 124, 1269–1294.
- Bassi, A. 2017. "Weather, Risk, and Voting: An Experimental Analysis of the Effect of Weather on Vote Choice." *Journal of Experimental Political Science*, Forthcoming.
- Brown, A. W., Mehta, T. S., and Allison, D. B. 2017. "Publication Bias in Science: What Is It, Why Is It Problematic, and How Can It Be Addressed?." In K. H. Jamieson, Dan M. Kahan, and D. A. Scheufele (Eds.), *The Oxford Handbook of the Science of Science Communication* (pp. 93–101). New York: Oxford University Press.
- Busby, E. C., and Druckman, J. N. 2017. "Replication Data for: "Football and Public Opinion: A Partial Replication and Extension." Harvard Dataverse. doi:10.7910/DVN/BKVLFI.
- Busby, E. C., Druckman, J. N., and Fredendall, A. 2017. "The Political Relevance of Irrelevant Events." *The Journal of Politics*, 79(1), 346–50.
- Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., and Sloan, L. R. 1976. "Basking in Reflected Glory: Three (Football) Field Studies." *Journal of Personality* and Social Psychology, 34(3), 366.
- Eldar, E, Rutledge, R. B., Dolan, R. J., and Niv, Y. 2016. "Mood as Representation of Momentum." *Trends in Cognitive Sciences*, 20(1), 15–24.
- Fowler, A., and Hall, A. B. n.d. "Do Shark Attacks Influence Presidential Elections? Reassessing a Prominent Finding on Voter Competence." *The Journal of Politics*, Forthcoming.
- Fowler, A., and Montagnes, B. P. 2015. "College Football, Elections, and False-Positive Results in Observational Research." *Proceedings of the National Academy of Sciences*, 112(45), 13800–804.
- Franco, A., Malhotra, N., and Simonovits, G. 2014. "Publication Bias in the Social Sciences: Unlocking the File Drawer." Science, 345(6203), 1502–5.
- Healy, A. J., and Malhotra, N. 2013. "Retrospective Voting Reconsidered." Annual Review of Political Science, 16(1), 285–306.
- Healy, A. J., Neil, M., and Mo, C. H. 2010. "Irrelevant Events Affect Voters' Evaluations of Government Performance." *Proceedings of the National Academy of Sciences*, 107(29), 12804–12809.
- Healy, A. J., Malhotra, N., and Mo, C. H. 2015. "Determining False-Positives Requires Considering the Totality of Evidence." *Proceedings of the National Academy of Sciences*, 112(48), E6591–E6591.
- Huber, G. A., Hill, S. J., and Lenz, G. S. 2012. "Sources of Bias in Retrospective Decision Making: Experimental Evidence on Voters' Limitations in Controlling Incumbents." *American Political Science Review*, 106(04), 720–741.
- Pierce, L., Rogers, T. and Snyder, J. A. 2016. "Losing Hurts: The Happiness Impact of Partisan Electoral Loss." *Journal of Experimental Political Science*, 3(1), 44–59.
- Schwarz, N., and Clore, G. L. 1983. "Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States." *Journal of Personality and Social Psychology*, 45(3), 513.
- Schwarz, N., and Clore, G. L. 2003. "Mood as Information: 20 Years Later." *Psychological Inquiry*, 14(3/4), 296–303.
- Schwarz, N. 2012. "Feelings-as-Information Theory." InPaul A. M. Van Lange, Arie W. Kruglanski, and E. Tory Higgins (Eds.), *Handbook of Theories of Social Psychology* (pp.289–308). Thousand Oaks, CA: Sage.