

## **Determining false positives requires considering the totality of evidence**

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Fowler and Montagnes (henceforth FM) independently replicate one finding in Healy, Malhotra, and Mo (henceforth HMM) that college football wins increase incumbent vote share (1, 2). While we interpret this result as evidence of irrelevant events impacting voters' decisions, which is consistent with established theory in the psychological and decision sciences literatures, FM conclude that chance is responsible. False positives can occur. Consequently, we performed several tests to address that possibility, but FM surprisingly ignore these analyses. While replication and re-analysis are important to scientific discovery, one cannot selectively consider pieces of evidence when evaluating past research. Our consideration of the totality of evidence (the full results in HMM and the new results in FM) leads us to conclude that college football games influence elections.

**Point 1: FM entirely ignore the most important analyses of the football data in HMM, the ones utilizing betting spreads to isolate surprise outcomes.**

The finding reported in the abstract of HMM (a 1.61 percentage point effect) comes from analyses comparing the actual outcomes of the games to what was projected beforehand by betting markets. This creates a quasi-experiment that isolates the surprise component of game outcomes. These “surprise wins” identify variation that has nothing to do with how good a team is in a given year altogether. This is the same approach used

by Card and Dahl in their paper showing that football games affect domestic violence (3). These results mean that FM can only be correct if teams systematically over many years happened to get lucky in both the game immediately before the election and the previous game (“surprise wins” result)—AND were better over the entire season (baseline result without point spreads). This is exceedingly unlikely.

**Point 2: FM entirely ignore HMM’s replication with a different sample collected from another sport.**

FM emphasize the importance of replication of empirical results. We agree. To confirm the original result, we conducted a survey experiment during the 2009 NCAA men’s basketball tournament. The results confirmed the general findings from the football data. Again, strangely, FM ignore these results.

**Point 3: FM conduct a series of auxiliary tests poorly designed to evaluate HMM’s results. The betting spreads analysis makes more sense than any of these tests.**

The main approach of FM is to conduct a series of auxiliary tests, the results of which FM claim are inconsistent with HMM’s original findings. All of these tests are flawed and rely on voters being decidedly more capable than much research (not just ours) suggests. We do not have space to discuss these individual tests in this letter, but have posted a detailed response online (4).

We thank FM for pushing us to reconsider the full set of empirical evidence. We have done so and conclude that college football wins increase incumbent vote share, consistent with a large literature on irrelevant events and voting. We look forward to future scholars evaluating the implications of these results for democracy, such as the excellent work of Ashworth and Bueno de Mesquita (5).

## References

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5. Ashworth, S, and Bueno de Mesquita E (2014) Is voter competence good for voters?: Information, rationality, and democratic performance. *Am Polit Sci Rev* 108:565-587.