

Corrigendum to “Information Spillovers: Another Look at Experimental Estimates of Legislator Responsiveness”

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December 8, 2016

In Coppock (2014), I presented a reanalysis of Butler and Nickerson (2011), a field experiment that tested the effects of providing state legislators district-level public opinion data on their roll call votes for a bill. The reanalysis employed a method introduced by Bowers, Fredrickson, and Panagopoulos (2013) to conclude that the Butler and Nickerson estimate of the total effect of treatment was biased downward; when spillovers were accounted for, the total effect of treatment was estimated to be nearly twice as large.

Due to a coding error, the results presented in Figures 2 and 3 of Coppock (2014) were incorrect. The similarity matrix I used falsely implied that all legislators were equally close to one another in ideological space. When corrected, the uncertainty attending to the estimates of the indirect effects of information as transmitted via the Ideological Similarity spillover model is larger. In light of these updated results, I revise my conclusions regarding the transfer of information within the New Mexico state legislature during this experiment. There is insufficient statistical evidence to conclude that indirect exposure to information altered legislator behavior.

In Figure 1 below, I present the original and corrected p-value maps. The original map led to the incorrect conclusion that the highest p-value treatment effect pair was -0.225 for the indirect effect and -0.300 for the direct effect. This pair of treatment effects was relatively precisely estimated, with 95% confidence intervals extending from -0.325 to -0.025 for the indirect effect and -0.575 to 0.000 for the direct effect. These calculations were incorrect. Instead, the highest p-value pair is -0.150 for the indirect effect and -0.250 for the direct effect. The 95% confidence intervals are much wider, at [-0.325, 0.200] for the indirect effect and [-0.625, 0.175] for the direct effect. The same error plagued the original Figure 3, which estimated the Ideological Similarity spillover model separately among legislators whose districts expressed high or low support for the bill. The original and corrected p-value maps are displayed in Figure 2.

The revised plots indicate that while this method may be suitable for investigating information spillovers, this experiment is underpowered to detect them. I regret the error. I am grateful to Peter M. Aronow, Jake Bowers, and Mark M. Frederickson, whose replication attempt uncovered the mistake that occasions the need for this correction.

Figure 1: Correction to Coppock (2014): Figure 2

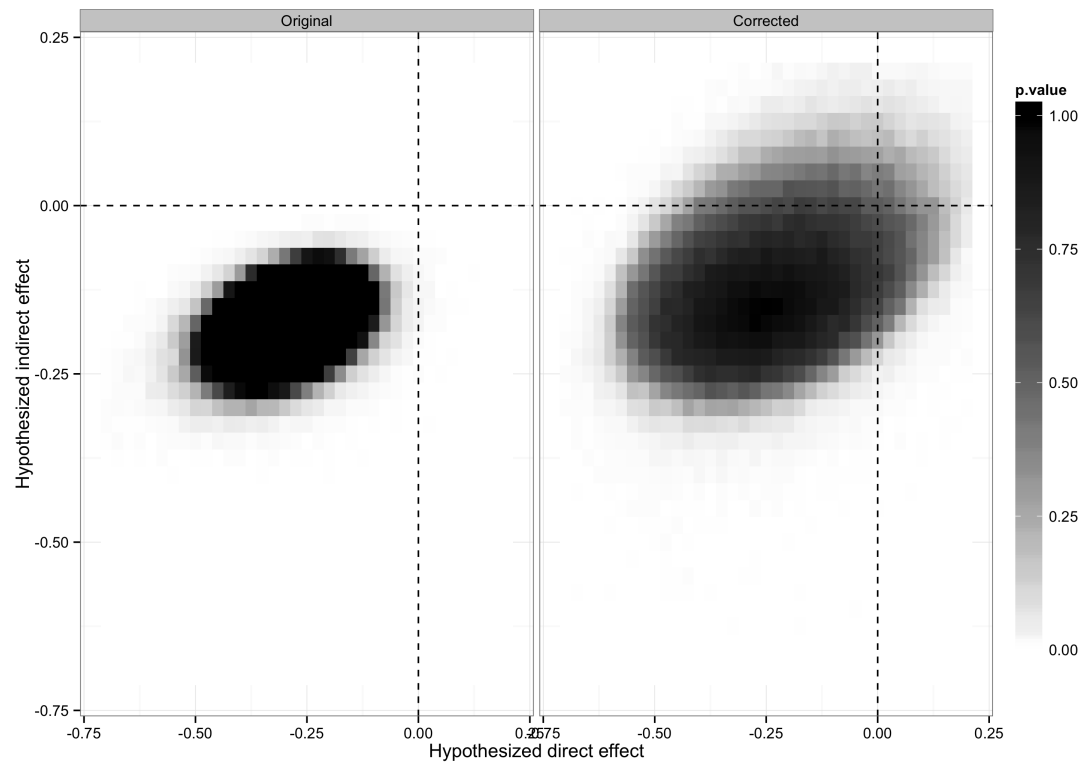
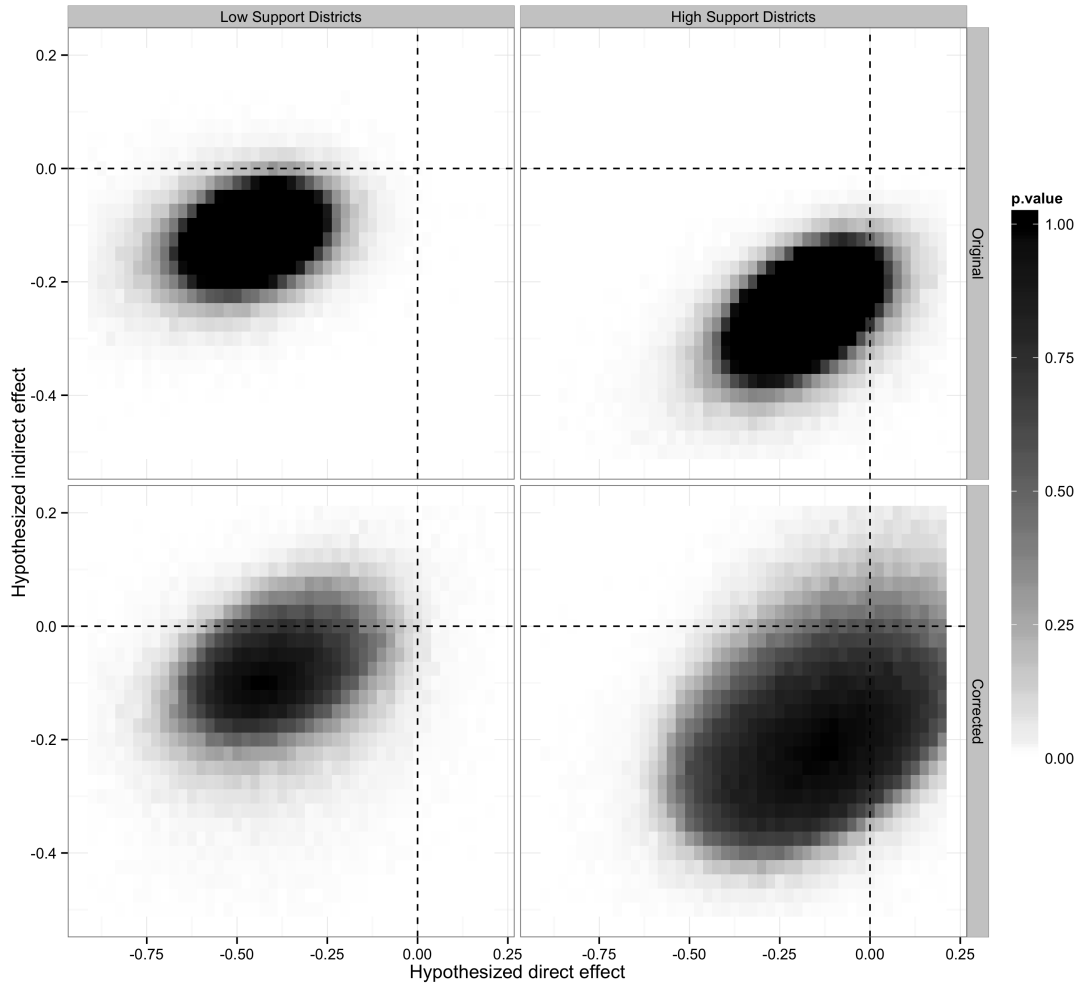


Figure 2: Correction to Coppock (2014): Figure 3



References

- Bowers, Jake, Mark M. Fredrickson, and Costas Panagopoulos. 2013. "Reasoning about Interference Between Units: A General Framework." *Political Analysis* 21 (1): 97–124.
- Butler, Daniel M., and David W. Nickerson. 2011. "Can Learning Constituency Opinion Affect How Legislators Vote? Results from a Field Experiment." *Quarterly Journal of Political Science* 6: 55–83.
- Coppock, Alexander. 2014. "Information Spillovers: Another Look at Experimental Estimates of Legislator Responsiveness." *Journal of Experimental Political Science* 1 (02): 159–169.