

How Do Politicians Respond to News?

Impact of Media Discourse and State Partisanship on Gun Legislation

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ABSTRACT

Politicians are concerned with the news sweeping the public. In particular, they are interested in mass shooting reports coming in from around the country. The present study adopted survival function to explore what kind of media discourses influences the possibility of gun bill legislation in terms of state partisanship and event interference. Results show that when newspapers set more “gun violence” agenda, Republican states are more likely to legislate an ongoing gun bill. On the contrary, when the “gun right” agenda prevails in news coverage, it is less likely for both Democratic and Republican politicians to pass a bill.

Data analysis in this study combines four official sources: 1) Media Cloud, an open platform tracking millions of stories published by news organizations every day; 2) Official records of massing shooting from the official FBI website; 3) Flag information on state partisanship from the National Conference of State Legislatures; and 4) Content coding of 3,276 gun bills at state level from 2012-2014. Observations have been expanded to 91,670 cases to fit Cox Proportional Hazard Regress and to capture the fixed event effect after a bill is introduced.

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INTRODUCTION

Modeling Variables

Count of gun right / gun control/ gun violence mention
Mass shooting count
State partisanship

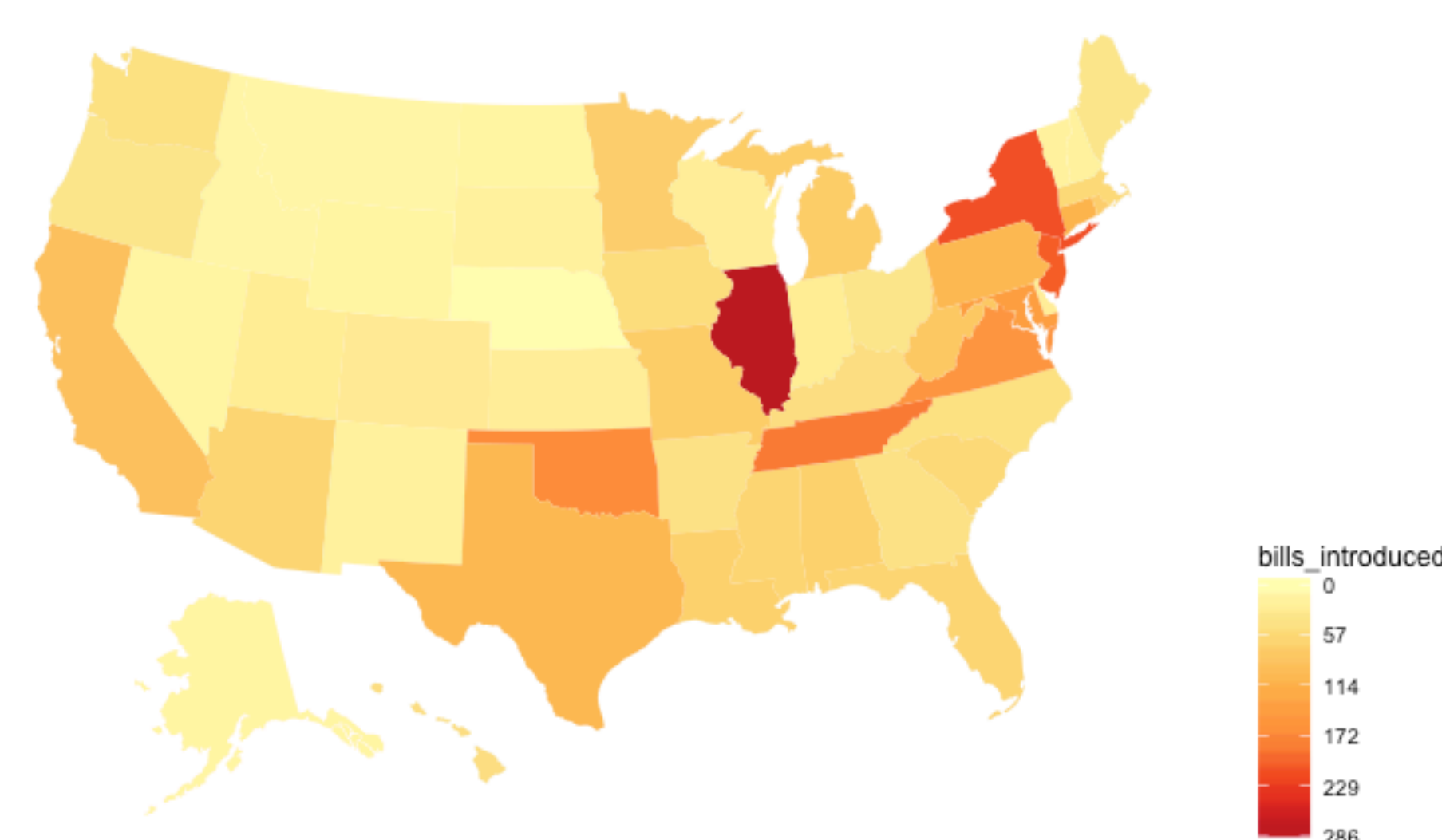
Statistical Model

Cox proportional hazard model
(Assumption: hazard ration at each time interval is fixed and to be derived from data rather than assumed)

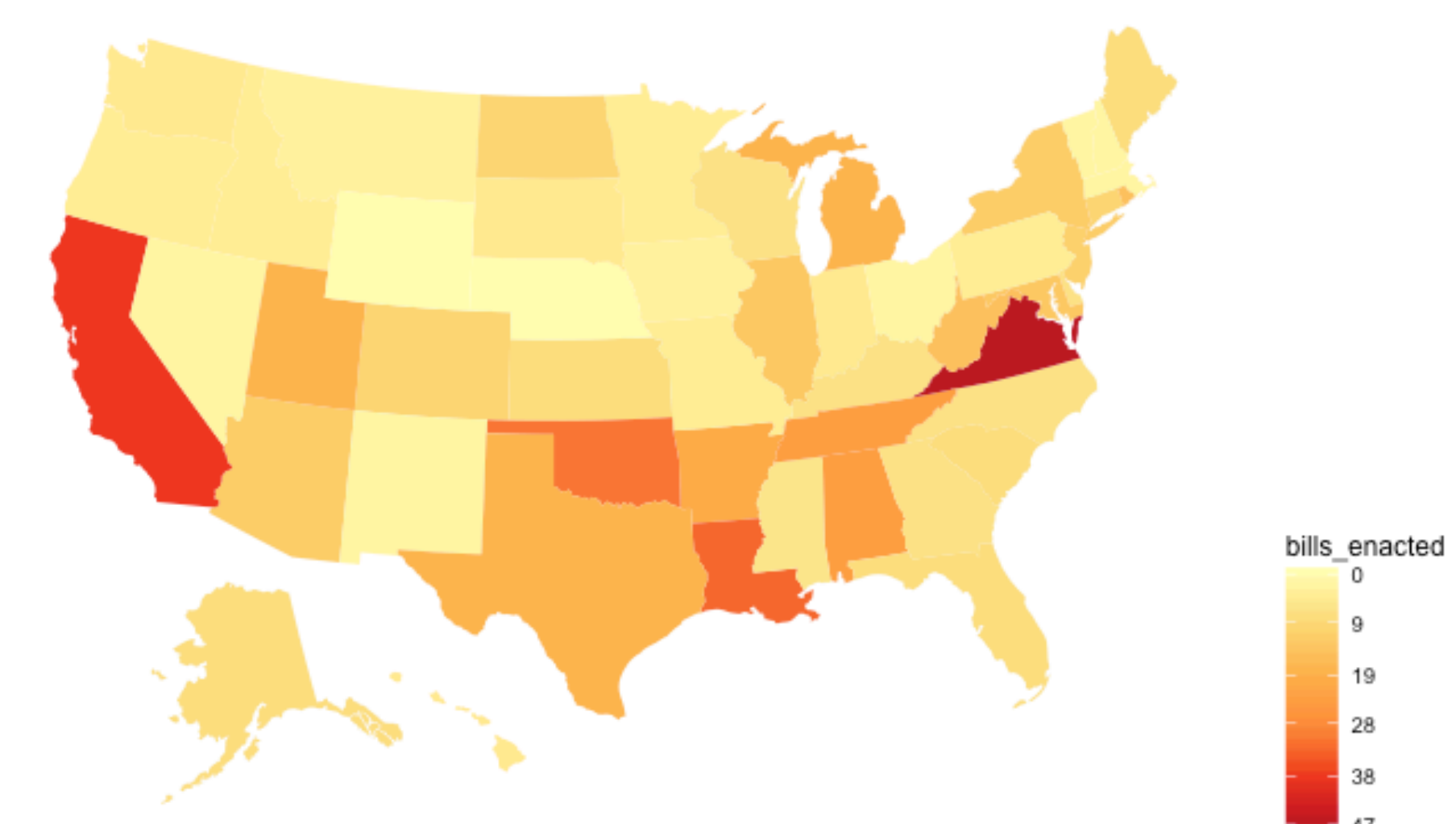
DESCRIPTIVE RESULTS

- Figure 1 shows a general picture of bill introduced and enacted in each state from 2012 - 2014

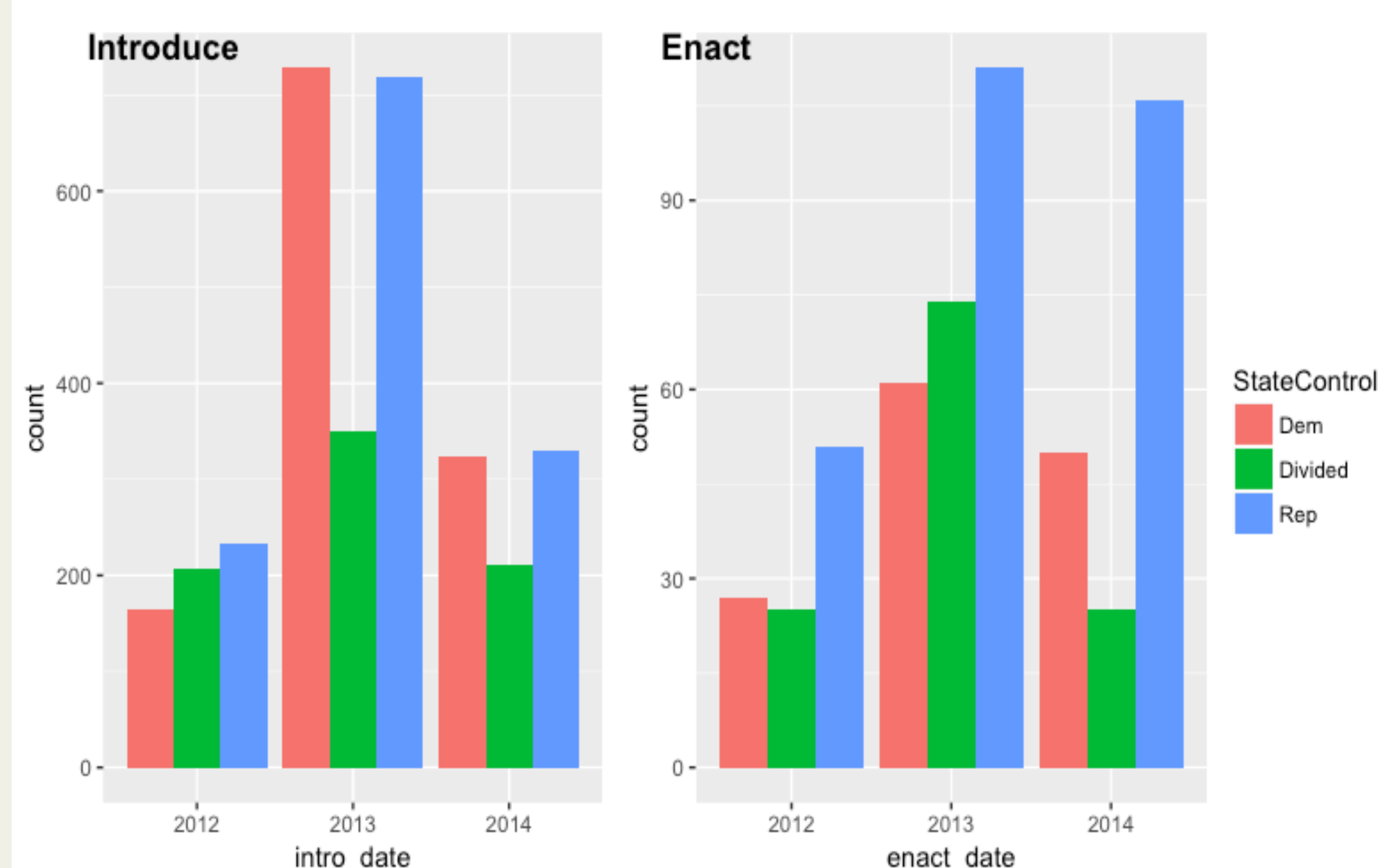
Geographic Distribution of Gun Bills Introduced in US (2012-2014)



Geographic Distribution of Gun Bills Enacted in US (2012-2014)



- Figure 2 suggests a tendency for Republican states to have more legislation activities than the Democratic and the Divided.



INFERENCE RESULTS

- Table 1 reveals that the significant impact of gun right and gun violence news discourse on legislation, yet in a different direction. More coverage of “gun right” will make gun bills harder to pass while on the contrary, the more mention of “gun violence”, the more likely for legislation. Their substantive change rates are 37% less and 43% more.

	Dependent variable:
	Bill Passage
Gun right (60 days)	-0.451*** (0.080)
Gun control (60 days)	0.028 (0.089)
Gun violence (60 days)	0.358*** (0.132)
Divided state	0.179 (0.124)
Republican state	0.306*** (0.106)
Mass shooting count	-0.049*** (0.006)
tt (news_gunright_60)	0.00003*** (0.000)
tt (news_guncontrol_60)	-0.00000 (0.00001)
tt (news_gunviolence_60)	-0.00002*** (0.00001)
R ²	0.002
Max. Possible R ²	0.077
Log Likelihood	-3759
Wald Test	120.9*** (df = 9)
LR Test	147.0*** (df = 9)
Score (Logrank) Test	154.4*** (df = 9)

Note: *p<0.1; **p<0.05; ***p<0.01

Table 1. Cox Hazard Proportional Model (n = 91, 373)

- Figure 3 graphs the exponential estimate for each covariate. The massing shooting event occurred between bill introduction to its pass/censored has a slightly negative effect on possible legislation. It is interesting to notice that compared with Democratic and divided bills stated, Republican ones are more likely to legislate gun bills, having more than 36% chance.

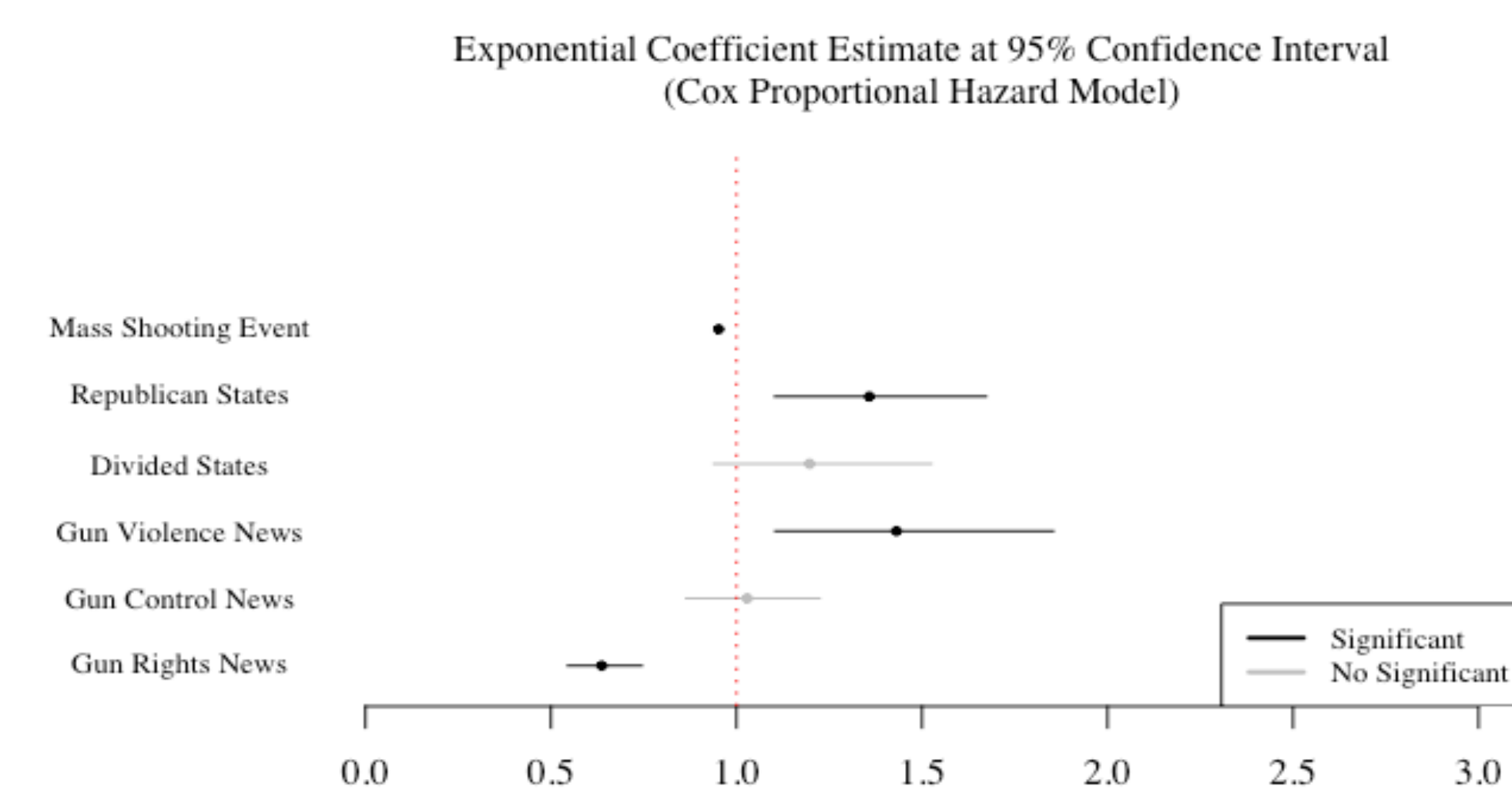
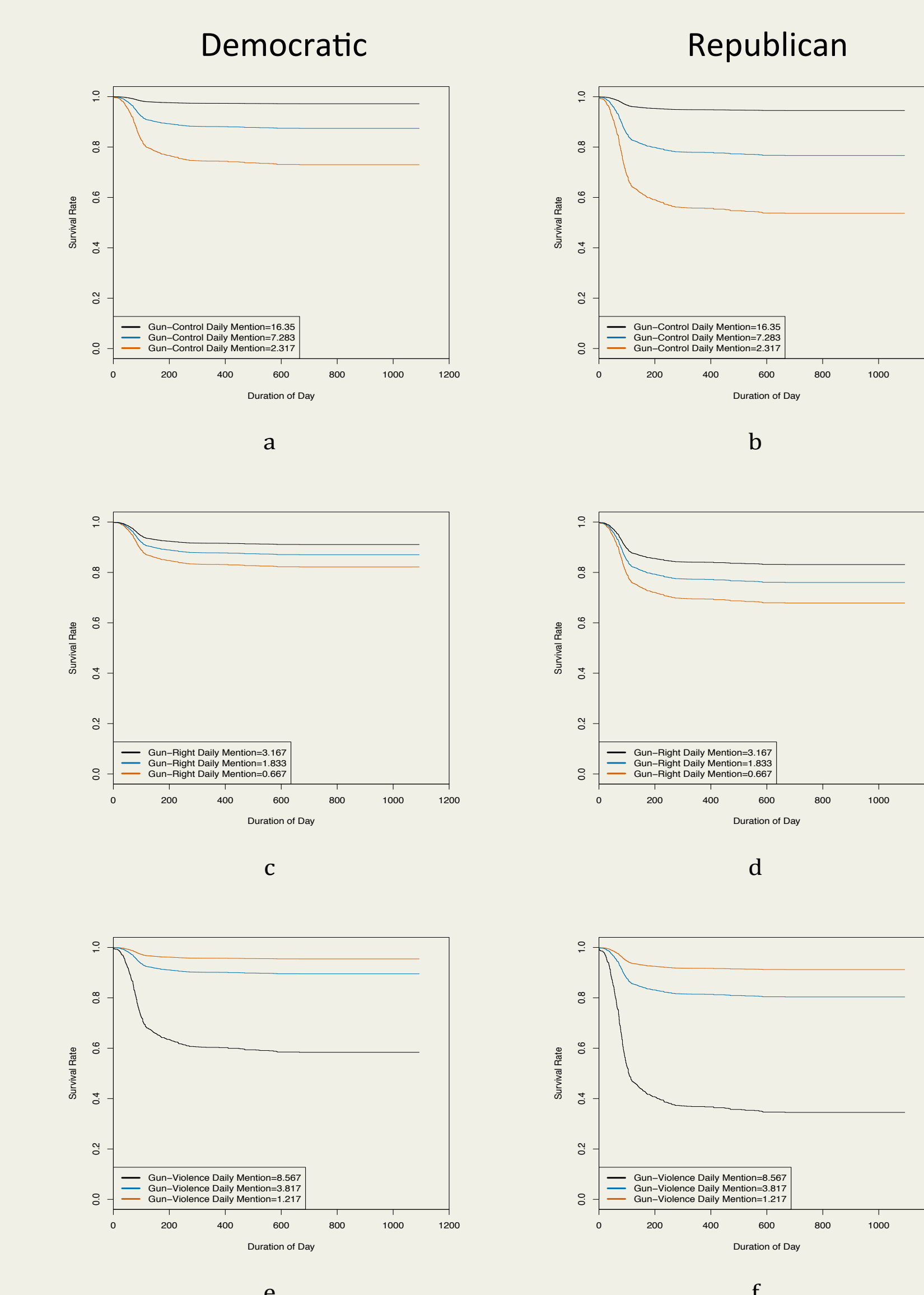


Figure 3. Exponential Coefficient Output of Cox Regression

PREDICTIVE RESULTS

- Figure 4 draws predictive models for three types of news discourse in Republican and Democratic states. The 1st, median and 3rd quantile of mention count are placed in the Cox model to observe the survival rate. If nationwide newspapers mention at least eight times of “gun violence” 60 days before a bill introduced, it will increase 40% ~ 60% possibility for legislation (Figure 2e and 2f). Also, Republican states are more likely to legislate gun bills if newspapers mention the least times of “gun right” (Figure 2c and 2d). Democratic states shows less sensitivity to “gun right” news topic.

Figure 4. Predicted Survival Rate of Media Discourse in Dem and Rep States



CONCLUSIONS

- The results suggest a pattern that media discourse influences state gun legislation. The most worthy finding not only comes from the potential link between media and legislative response, but the causal dynamic from the beginning of the mass shooting event, going through news coverage and public perception, to the legislation likelihood and direction as policy outcome. Future analysis could include, but not limited to answering questions, such as to what extent the content of bill mirror news discourse and the possibility of restrictive/ losing/ neutral legislation.