Attributional Differences Amongst the Politically Knowledgeable:
How Political Knowledge Impacts the Causal Determination of Mass Shootings

By
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Attributional Differences Amongst the Politically Knowledgeable: How Political Knowledge Impacts the Causal Determination of Mass Shootings

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Abstract: We know a lot about the underlying characteristics which effect the causal attributions individuals make. The current literature emphasizes the effect partisanship has on whether people make internal or external attributions. However, most of this literature ignores individual differences within parties. As such, the literature finds that Democrats are more likely to give external attributions while Republicans are driven by internal ones. Most argue that this partisan distinction leads to differing policy positions. This paper uses logistic regression on national survey data to show how political knowledge changes the likelihood of partisan attributional belief. The more knowledgeable partisans are, the more likely they are to make casual attributions which reinforce their policy preferences.
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To understand why some government actions are possible while others fail, we must understand the mindset of individuals across the United States. On July 20, 2012, an unstable gunman entered a Century 16 movie theater in Aurora, Colorado, and took the lives of 12 individuals, injuring 70 more. No shooting had had a higher number of casualties at that time. A few months later, on December 14, 2012, another gunman entered Sandy Hook Elementary School in Newtown Connecticut. He took the lives of 20 children between the ages of 6 and 7 years old, murdered 6 adult staff, and then took his own life. The tragic nature of these shootings led many to believe that new gun legislation would be imminent.

President Obama proposed legislation to Congress on three occasions, aiming to ban assault weapons, enforce universal background checks, and limit magazine capacity. Each measure was defeated in Congress. Since members of Congress are “single-minded seekers of re-election,” what the public believes about the nature of mass shootings has an impact on the ability of politicians to pass policy (Mayhew 1974). What mechanisms help the public determine the cause of tragic events?

Attribution literature suggests that individuals seek to bring order and logic into their lives by understanding what causes certain events (Heider 1958). People rely on either internal or external attributions to make sense of the world. Internal attribution focuses on the disposition of individuals, while external attribution looks to broader societal factors as the cause of events. Evidence suggests that those belonging to different political parties tend to rely on different attributions (Barry et al. 2009; Hughes and Tuch 2000). Having more education increases this disparity between the parties (Joslyn and Haider-Markel 2013).

Evidence suggests that the public has a poor understanding of even the most rudimentary political facts of their day (Converse 1964). The use of heuristics has been shown to help
unknowledgeable citizens vote in harmony with their beliefs (Lupia 1994). Yet, others argue that cognitive processing can be susceptible to bias and therefore unreliable (Bartels 1996; Kuklinski and Quirk 2000; Kunda 1990; Baumeister and Newman 1994). This is particularly true for the partisan who construe facts to confirm their predispositions (Taber and Lodge 2006).

The connection between political knowledge and causal attribution needs further exploration if social scientists and policy experts want to comprehend the policy debates that occur after shootings. Individuals should not need short cuts after a well broadcasted tragedy. Heuristics are used because citizens have a scarcity of time and other resources to devote to social-political concerns. The prominence of a mass shooting in the media lowers the costs of attaining information. It is not difficult to determine an attribution to the shootings, therefore all citizens irrespective of social economic status will be able to develop an opinion.

Those coming into contact with such prominent stories ought to react to them in ways consistent with their predispositions. If so, party identification, education, and a host of other individual dispositions would cause gaps between the casual attributions made by different groups. We argue that those with more knowledge of politics will be more likely to pick an attribution which confirms their biases. If true, political knowledge will act to magnify partisan biases.

**Attribution Theory**

Heider (1944, 1958) argues that individuals seek to bring order and logic into their lives by understanding what causes impactful events in their lives. In essence, individuals go on a search for causality, to make sense of an event. Members of society can usually find a motivation by examining different environmental structures. When people do not find that the cause is due to an environmental factor, they begin an examination of the primary actors which are analyzed
to determine causes (Jones and Davis 1965; Kelley 1967). Once motivation is properly attributed, order is restored to the individual’s world. The first type of attribution mentioned above is known as external/environmental attribution, while the latter is internal/dispositional attribution.

External attribution ties causation of human behavior to social context. Internal attribution focuses on the character, attitudes, personality, or dispositions of individuals as a means of explaining their behavior (see Joslyn and Haider-Markel 2013). Individuals tend to over-focus on internal factors, leaving out important societal determinants. This phenomenon is known as fundamental attribution error (Ross 1977). Despite some criticism as to whether fundamental attribution error should be considered an error, there are clear political implications when individuals hyper-focus on one type of attribution, ignoring the other (Harvey, Town, and Yarkin 1981; Maruna and Mann 2006).

Other researchers have found variations in how people reach conclusions about causation since the emergence of attribution theory as a way of understanding human processing. One approach is concerned with actor-observer differences in attribution, and the effect of the attention given to an event (Jones and Nisbett 1971). According to this approach, an individual who is more involved with their environment is more likely to ascribe the cause of an event to that environment. In this context, it can be assumed that the politically aware are more likely to view a shooting through a political frame. Conversely, the passive observer is more likely to associate causality to the actor’s disposition. Both are confronted with a search of causality when the saliency of an event is high.

Researchers have used attribution theory to examine citizens’ causal influence on policy. Evidence suggests that the type of attribution citizens used had a significant impact on their
support for race-based policies (Hughes and Tuch 2000). Policy differences are further exacerbated when attributional belief is broken down by the political association of the respondents. Democrats are more likely to believe in environmental attribution, while Republicans focus on dispositional factors (Haider-Markel and Joslyn 2008). Accordingly, research shows that Democrats are more likely to support health policies which place higher responsibility on advertisers and businesses, rather than a higher tax on unhealthy food. The focus for Democrats is to fix an unhealthy environment as opposed to penalizing individuals (Barry et al. 2009). This research, and others, suggests that individuals’ casual attributions are determined by their political identities.

**Political Knowledge**

Partisan views alone cannot fully account for individual political biases. In the 1960s, with the emergence of survey data, political scientists were shocked to find that large segments of the public did not seem to grasp more than the basics of political events or public policy (Converse 1964). Fewer still would consistently report attitudes towards the most important issues of their time. On account of that initial realization, researchers have debated a slew of important topics, including the threat presented from a citizenry which lacked political knowledge (Galston 2001). We know that partisanship can be a cure to political apathy. For instance, partisans are more likely to vote (Bartels 2000).

Voting is a desirable trait in any democracy, however, partisanship does not necessarily increase political knowledge. There are two problems with relying on partisanship as a means of producing more engaged citizens. First, heuristics are used in place of systematic investigation into political topics (Lupia 1994). For example, Democrats and Republicans construed the same information about U.S. troop causalities in a manner consistent with their support or opposition
to the Iraq War (Gaines et al. 2007). Democrats consistently interpreted given levels of troop causalities after the Iraq evasion as higher than Republicans (ibid). Meanwhile, Republicans believed that weapons of mass destruction had been found when they were not.

Second, education has been shown to interact with partisan views to create even greater fundamental attribution error (Josyln and Haider-Markel 2013). This purports that even if partisan voters did rely less on heuristics by educating themselves on the issues, they are more likely to look to dispositional factors to explain the world around them. If societal factors play a role in causing a phenomenon, they may be unintentionally downplayed for partisan reasons. Gomez and Wilson (2001) call for further investigation into how the dynamics of attribution may help researchers uncover how political sophistication shapes public opinion. Their study found that attribution processes and political sophistication produce significant heterogeneity in presidential economic voting, and suggest that there is good reason to examine their effects in other areas.

People are likely to use information that is consistent with prior knowledge (Fiske, Kinder, and Larter 1983). However, elites have greater online-processing capabilities, and thus tighter organization of shared knowledge. Political elites’ added online-processing ability leads these experts to recall biased information and incorporate new biased information to a greater degree than political novices (ibid). If this is true, we would expect to see the partisan who are politically sophisticated have the highest probability of attributing causes of events in a way to confirm their predispositions.

However, this does not necessarily indicate that a cognitive choice is being made. Theories of motivated reasoning would suggest that people unwittingly utilize biased cognitive processes (Kunda 1990, 480). People tend to reason in a way that confirms previous beliefs and
dispositions (Taber and Lodge 2006). “[They] marshal the best available evidence for the preferred conclusion or against the unwanted conclusion” (Baumeister and Newman 1994, 5). For this same reason, researchers have argued against the use of cognitive heuristics (Bartels 1996; Kuklinski and Quirk 2000). Bartels (1996) demonstrated the real and politically consequential effects of assuming that cognitive heuristics can overcome the problems of cognitive limitations and political ignorance. He suggests that serious bias can accompany cognitive efficiency through short cuts.

If knowledge about the political environment has an effect on causal attribution, then political knowledge should have an impact on the cause individuals ascribe to mass shootings. Those with high levels of political knowledge are going to experience a tragedy, like a mass shooting, in a political context (see Duval and Wicklund 1973). The knowledgeable partisans will be attributors who have information from multiple observations, further ingraining their predispositions (Kelley 1973). The politically ignorant, on the other hand, will be prone to look at the dispositions of individual actors in order to make sense of tragic events (Jones and Nisbett 1971). They are likely to believe that such events occurred because of mentally sick individuals rather than systematic societal failings.

This distinction leads us to four essential hypotheses for understanding the interaction between political knowledge and partisanship on causal attribution. First, the politically unknowledgeable, irrespective of party affiliation, should be more likely to attribute mass shootings to individual predispositions (H1). Second, politically knowledgeable Republicans will be more likely than the unknowledgeable to attribute mass shootings to individual dispositions (H2). Third, knowledgeable Democrats will be more likely to attribute mass shootings to social context (H3).
Data and Methods

In order to understand the public’s attribution of mass shootings, I employ two national surveys. Each was administered soon after the 2012 shootings occurred. I will introduce and examine each dataset in chronological order.

Century 16 Movie Theater

Less than two weeks after the shooting in Colorado took place, Princeton Survey Research Associates International conducted a national survey of 1010 adults. Of particular importance, respondents were asked, “Thinking about the shooting in Colorado last week…Do you think this shooting reflects broader problems in American society, or are things like this just the isolated acts of troubled individuals?” A subset of 932 respondents answered the question. Just over 28 percent of respondents attributed the shooting to broader societal issues, while the other 72 percent blamed the individual gunman. Responses to this question are used as the dependent variable in this study. The variable is coded zero for isolated individual issues and one for broader societal problems.

Party affiliation, as well as political knowledge, is the key independent variables in the study. The survey asked about the partisanship identification of each respondent. The political knowledge variable is an index created from eleven questions asked in the survey about a range of political topics. For each respondent, the number of correctly answered questions was divided by the total number of questions asked. This method for creating an index is consistent with Lupia (1994).

Several important controls are needed before we can ascertain the relationship between causal attribution, party identification and political knowledge. Urban-rural residences, race, age, and gender have been shown to be important determinants of gun related policies (Haider-
Logistic Regression was used to determine the effect of partisanship and political knowledge on causal attribution.

\[(\text{Insert Table 1})\]

Table 1 provides the log odds of attributing the Aurora shooting to society. Unexpectedly, Republicans are more likely to make the environmental attribution than Democrats. One might assume that Republicans would not want to make a societal claim that would open doors for governmental action. Republicans are generally opposed to government intervention, which could lead to a growth in the size of government. This inconsistency shows that the public generally does not answer questions consistent with their ideology (Converse 1964).

Political knowledge has a statistically significant, positive effect on a societal attribution. The finding is consistent with hypothesis 1 that more knowledgeable citizens ought to apply their political awareness to the shooting. The politically knowledgeable are usually more involved in their communities and national events, such as elections, protests, and other political activities (see Rosenstone and Hansen 2003). During a tragedy with national exposure, this lens primes them to take a societal approach to attribution.

The other two hypotheses I have set out to support are that the partisan are motivated to use information consistent with previous reasoning. That is, Republicans with greater online processing and capacity should be more capable of answering the attribution question consistently with their ideology. As seen in Figure 1, knowledgeable Republicans are more likely to make the individual level attribution. Looking to individualistic determinants is of benefit because it alleviates responsibility to gun manufacturers and a gun accepting society. Democrats on the other hand, by attributing the shooting to society, give justification for governmental
involvement.

(Insert Figure 1)

**Sandy Hook Elementary**

In the case of Sandy Hook, the Princeton Survey Research Associates International conducted a survey of 1006 adults. The dependent variable for this model comes from a similarly worded question, but has a more balanced result from respondents. Of the 671 respondents who answered the question, 362 attributed the shooting to broader societal problems, while 309 respondents felt that the shooting was an isolated act. The variable is coded consistent with the Aurora model.

For this data, I continue to use party affiliation as the independent variable; however, it is interacted with education as opposed to political knowledge. Education is an imperfect measure of political knowledge, however; several studies have found them to be closely related and have employed an education measure to proxy political knowledge (Bennett, 1995; Converse, 1964; Krause, 1997; MacKuen, 1984; Baum 2003).

Education ranges from individuals who graduated high school to those with a post graduate or professional degree. There are seven levels in the education variable. Other levels included some high school, high school graduate, some college, two-year degree, four-year college degree, and some post graduate or professional study. The education variable was treated as a continuous and categorical predictor in two separate models. An analysis of variance (ANOVA) was used to determine which model specification was most correct. The test resulted in null results (P = .51) and the model using education as a continuous predictor was used. The control variables are the same as the first model. A logistic regression was then used to determine the effect of partisanship and political knowledge on causal attribution.
Model 2 provides the logistic regression for the Sandy Hook data. The model shows that women are also more likely to make a causal link to society than men are. Having a higher education increases the likelihood of attributing the Sandy Hook shooting to broader societal problems. Being a Republican also increases the odds of attributing the shooting to society.

As can be seen in Model 2, the interaction between party and education did have the expected results. Republicans and Independents are less likely than Democrats to agree with the broader attribution as their education increases.

(Insert Figure 2)

Figure 2 does not provide evidence to support the first or second hypothesis, but there is evidence to support the third. The graph shows that Republicans and Independents are not impacted as the educational attainment of the respondent increases, while Democrats are significantly impacted by education. Educated Republicans were not less likely than non-educated Republicans to believe the shooting had something to do with broad societal issues. The first hypothesis stated that those without political knowledge would be more likely to attribute the shooting to individual level determinates. The evidence from the Newtown data does not support this.

These unexpected results may be circumstantial. The Sandy Hook shooting saw predominantly the murder of children. Whether cognitive bias is present or not, it is difficult to believe there is not something problematic with a society where children are targeted in a shooting. However, Figure 2 shows that Republicans are nearly evenly divided as to the cause attributed to the shooting. It appears that they are ambivalent about the attribution. Perhaps the circumstances of the shooting are the cause of this result.

Democrats whose highest level of education is a high school diploma have a 40 percent
probability of associating the Sandy Hook shooting to broader environmental factors, whereas the most educated Democrats have an 80% probability. This is a drastic increase. The analysis does give full support to the third hypothesis. Politically knowledgeable Democrats are more likely to attribute mass shootings to society. This result shows that educated Democrats are best equipped with taking evidence placed before them and incorporating it into the attribution that is consistent with their ideology.

**Discussion and Conclusion**

This research sought to understand the causal attributions associated with two mass shootings, Sandy Hook Elementary School and Aurora Century 16 Movie Theater. Drawing on motivated reasoning and attribution theory, I am able to explain an underlying cause for how people cognitively process mass shootings. I understand the motivation for distinct cognitive processing by examining the interaction between partisan identification and political knowledge. Having two different cases is helpful in providing evidence for the theory. The two shootings have distinct differences. One involved a school, and thus targeted children, while the other was at a private business and adults were casualties.

Irrespective of the situation, there seems to be consensus between the two models. Democrats are impacted by political knowledge to attribute the shooting to a failure in society. Logically, those who are politically knowledgeable understand that the mass shootings provide proof that guns are harmful to society. They incorporate their awareness into their processing of the tragic events, which in turn fuels their beliefs about needed gun control measures.

Politically knowledgeable Republicans ought to be just as affected by their increased online processing as Democrats. Unlike Democrats, Republicans are theorized to blame individual action, not society. In fact, the Aurora model shows that Republicans with high political knowledge scores are more likely to attribute the shooting to a troubled individual. The
Sandy Hook model does not provide evidence for the second hypothesis. Figure 2 shows that Republicans are consistent about their opinion regardless of their educational attainment. I theorize that this is due to the circumstances surrounding this shooting. In the case of Sandy Hook, children were the primary victims. It could be that Republicans, as a group, are ambivalent due to this fact. Further studies will need to be done to see how the involvement of children in tragic events impacts attribution.

In both cases, I avoid any claim that this process is conscious. Indeed, it takes an extreme amount of metacognition in order for individuals to understand their own biases. The reason politically knowledgeable partisans are able to make attributions consistent with their ideological preferences is due to greater amounts of online processing. The findings suggest important implications for gun related policies. This study also suggests that perhaps it is the most educated that drive partisanship in America.

Consistent with Haider-Markel and Joslyn’s (2013) findings that knowledgeable Democrats were more likely to attribute the shooting to broader societal problems, the politically knowledgeable are more aware of the implications associated with the framing of events. The federal government does not have a compelling reason to create policies restricting guns if mass shootings are viewed as isolated problems having to do with mentally unstable individuals. Republicans are less supportive of allowing government to restrict their personal freedoms, so they are likely to engage in biased processing (Kunda 1990, 480). Likewise, knowledgeable Democrats who want the government involved in society are less likely to attribute mass shootings to personal dispositions.

The evidence presented provides an explanation for President Obama’s lack of success in passing gun legislation. If not even all Democrats can agree that mass shootings are the result of
a societal level failure, then it is going to be next to impossible to convince Congress to pass any sort of meaningful legislation.

Second, this understanding of causal attribution might explain the deepening partisan divide. Democrats and Republican might struggle to understand each other because they view the same events through different casual lenses. This is exacerbated by the knowledgeable that unconsciously use attributions to defend their policy positions. The other explanation is that the partisan who are knowledgeable about politics know that they have to frame events in ways that help their policy positions in order to better convince or caution government from acting. Future work should research whether political elites specifically use causal attributions as a means of framing tragic events to a less knowledgeable population. Elites could be using the framing of causes as a tool to benefit their political aims or might be unconsciously using biased cognitive processing.

Future work might also look at how attribution to mass shootings changes depending on political rhetoric, or when the shooting is targeting a political target. The effects of education on attribution during a partisan shooting or after a period of polarizing rhetoric could yield more extreme bias in cognitive processing.
### Table 1: Attributing to Broader Problems

<table>
<thead>
<tr>
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<th>Model 1: Aurora</th>
<th>Model 2: Aurora</th>
<th>Model 3: Newtown</th>
<th>Model 4: Newtown</th>
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* *** p < 0.001, ** p < 0.01, * p < 0.05 Standard Errors are in the Parentheses
Figure 1: Aurora
Predicted Probabilities of a Broader Problems Attribution

party
- Democrat
- Independent
- Republican

Note: Shaded bands are confidence intervals
Figure 2: Newtown

Predicted Probabilities of a Broader Problems Attribution

Note: Shaded bands are confidence intervals
References


