What makes gun violence a (less) prominent issue?

A computational analysis of compelling arguments and selective agenda setting

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Abstract

Despite several transient spikes in response to the deadliest mass shootings, the U.S. population continues to perceive gun violence as less important than other issues and the public opinion remains divided along partisan lines. Drawing upon literature of compelling arguments and partisan media, this study investigates what kind of news framing—episodic framing that focuses on individual stories or thematic framing that emphasizes broader context—makes gun violence a more or less prominent issue. Specifically, this study uses the state-of-the-art machine-learning model BERT to examine 25 news media's coverage of gun violence, and then pairs the results with a two-wave panel survey conducted during the 2018 U.S. midterm elections. Results demonstrate that episodic framing of gun violence in the mainstream media increased the issue salience among conservatives. However, exposure to episodically framed coverage of gun violence in their like-minded media made conservatives believe the issue was less important.

Keywords: agenda setting, framing, compelling arguments, selective exposure, machine learning**,** BERT, panel survey

The political climate in the United States is increasingly polarized (Pew Research Center, 2017). Liberals and conservatives are divided on a wide range of political values to the point that they inhabit almost two different worlds. One possible explanation of this trend is media fragmentation, particularly with the rise of partisan media. Conservative- and liberal-learning media have been depicting two distinct versions of social reality and their impact on political polarization has been profound (Mitchell, Gottfried, Kiley, & Matsa, 2014; Stroud, 2011). Emerging partisan news websites such as *Breitbart* have become an especially powerful voice, competing with not only traditional partisan media but also those in the mainstream.

This study takes an agenda-setting perspective to explicate the influence of mainstream and partisan media on public opinion. Agenda-setting theory asserts that the news media can determine the public's perception of the most important problems facing the nation (McCombs, 2014). As Stroud (2011) argued, this media function of building a shared issue agenda among citizens is crucial to democracy, because it allows the government to better allocate limited resources and take actions more efficiently. In a fractured media landscape, however, various media outlets may set different agendas by prioritizing different issues. Even if the news media do cover the same issues, they may emphasize different aspects, which may alter the public's perceived importance of the issue. The latter process is described as the "compelling arguments" hypothesis (Ghanem, 1997). The exposure to different media outlets may lead to a divided public with different issue priorities, and ultimately divergent interests and goals.

Drawing upon agenda-setting theory and the compelling arguments hypothesis in particular, this study explores the link between news coverage and the potential shift of public opinion on a particular issue—gun violence. The United States has the highest rate of gun-related homicides in the developed world (Aizenman, 2018). Despite the seriousness of the issue, little

Congressional action has been taken, partly because Republicans and Democrats remain divided on most gun-related policies (Pew Research Center, 2018). After all, the U.S. public even disagrees on whether gun violence is an important issue that should be tackled. While the majority of Democrats ranked gun violence as one of the nation's most serious problems, less than a third of Republican voters agreed (Dam, 2018). In fact, despite several transient spikes in response to the deadliest mass shootings (Jones, 2018), the U.S. population continues to perceive gun violence as less important than other issues such as immigration and healthcare. Aside from a deep-rooted gun culture, what else contributes to public indifference toward and partisan divide over gun violence? To answer these questions, the study tests the compelling arguments hypothesis. We expect that framing gun violence episodically or thematically—focusing on individual stories or the broader context of an issue (Iyengar, 1991)—in different media may generate distinct influences on the public of varied political orientations.

This study employs a state-of-the-art machine-learning model to examine 25 news media outlets' coverage of gun violence, and then pairs the results with a two-wave panel survey conducted during the 2018 U.S. midterm elections. The study advances previous literature in several important ways. First, it enriches the compelling arguments hypothesis by incorporating the framing literature of episodic versus thematic frames, and by elaborating on the mechanism that defines a compelling argument. Second, the study uses a strategy that matches individuals' opinion and their media content exposure (Rössler, 1999; Shehata & Strömbäck, 2013) to investigate the media effect at the individual level. Agenda setting is typically examined at the aggregated level; this "matching" method is more suitable because it considers individual variances in media exposure. Third, the study explores the impact of varied media outlets—

mainstream and partisan, traditional and emerging—to depict the emerging mediascape more holistically than previous research that focused on a select few traditional media organizations.

Agenda Setting, Framing, and Compelling Arguments

Agenda-setting theory proposes that the salience of objects can be transferred from the news media to the public's mind (McCombs, 2014). Attribute agenda setting, the theory's second level, further suggests the salience of attributes that describe a given object can also be transferred from the media to the public agenda. One less developed area of research that connects the two levels of agenda-setting theory is the compelling arguments hypothesis (Ghanem, 1997). It suggests that certain attributes of an object have particular resonance with the audience, and are therefore more effective than other attributes in altering the public's perceived salience of the object. In this light, compelling arguments "are *frames*, certain ways of organizing and structuring the picture of an object that enjoy high success among the public" (McCombs, 2014, p. 1971, italics added). The difference and convergence between attribute agenda setting and media framing is debatable. One common thread we emphasize here is that both theories assert some aspects of news coverage are more important than others. As Reese (2001) argued, one can frame a certain issue in multiple ways, but a frame must be shared on some level for it to be communicable and effective. For instance, frames that "employ more culturally resonant terms have the greatest potential for influence" (Entman, 2003, p. 417). Therefore, compelling arguments can be considered as frames that are effective in raising the public's awareness of a given issue. To be clear, while framing effects are often measured in terms of opinion and attitude change, the compelling arguments effect is the increase in issue salience on the public agenda.

Empirical evidence has been found for the compelling arguments hypothesis. Kiousis (2005) examined five U.S. presidential elections (1980-1996) and found that the media salience of some political candidates' attributes, morality in particular, was positively associated with the perceived public salience of those candidates. Similarly, Sheafer (2007) found that negative media coverage, more so than overall coverage alone, of the economy increased the issue's perceived salience on the public agenda. More recently, Saldaña and Ardèvol-Abreu (2016) suggested that an object's bundles of attributes in media coverage resonate more with the audience than other bundles, which could increase the object's public salience.

As these studies reveal, not all attributes are equally powerful in setting the agenda and some attributes may even decrease an object's public salience. During the 1990 German national election, a newspaper's positive tone describing the environment reduced its perceived salience, a process described as "agenda deflating" (Schoenbach & Semetko, 1992). When covering the Clinton/Lewinsky scandal, news media most frequently touched on the story's sexual aspect, which was of low relevance for the public and negatively affected its issue salience (Yioutas & Segvic, 2003). The authors suggested that the compelling arguments effect explains how, despite the media's extensive coverage of the scandal, Clinton's approval ratings remained unaffected.

Research about compelling arguments sheds light on how a particular type of news coverage will increase or decrease the issue priority among the public. Despite its importance, we suggest that this line of compelling arguments research is limited in two regards. First, the scope of the type of compelling arguments has been contained to substantive or affective attributes. Substantive attributes are the cognitive characteristics that describe an object (e.g., a politician's qualifications), while affective attributes are concerned about the message valence (e.g., positive and negative). Although the compelling arguments hypothesis theoretically builds

a link between attribute agenda setting and framing, the empirical research has not tapped into the nuances of media framing, which go beyond substantive and affective attributes in agenda-setting studies. Second, most compelling arguments studies rely on post-hoc realizations of an attribute's success in setting the public's agenda. It is not clear what constitutes a compelling argument, thus making the hypothesis unfalsifiable. To address these limitations, we discuss criteria that comprise compelling arguments. In particular, borrowing from framing research, we posit that episodic—as opposed to thematic—framing should serve as a compelling argument in transferring the salience of enduring political issues such as gun violence to the public agenda.

Thematic versus Episodic Frames as Compelling Arguments

In explaining culturally resonant frames, Entman (2003, p.417) suggested that "noticeable, understandable, memorable, and emotionally charged" frames should be more powerful in influencing the public opinion. The "emotionally charged" criterion is particularly relevant to the compelling arguments hypothesis because the media effect's outcome is change in perceived issue importance, which entails public attention to a given issue. Research shows that emotion in the news can be a powerful driver of attention and memory. In one experiment, emotionally driven first-person stories were more effective than those without emotionality in memory formation, in terms of encoding, storage, and information retrieval (Bas & Grabe, 2015). Studies have also shown that arousing content, particularly negative arousing content such as violence or crises, increases memory of the content (Newhagen, 1998). This mechanism suggests that emotionally charged attributes or frames should operate as compelling arguments to increase public issue salience. Given that emotion enters news messages in various ways, compelling arguments can be operationalized differently. Drawing upon framing research, this

study focuses on a specific set of frames: episodic and thematic—and hypothesize that the former should serve as a compelling argument because of its emotional appeal.

To define, episodic frames focus on concrete events or an individual's story, while thematic frames situate the story in a broader context (Iyengar, 1991). In the case of gun violence, DeFoster and Swalve (2018) noted that there have been significant shifts over the past 20 years in how it has been framed in the news: from isolated events that included more episodic frames to wider "societal-level thematic concerns," treating severe incidents like mass shootings as "exemplar(s) of a broader problem" (p. 10). In contrast, Holody and Daniel (2017) found that the media framing of the 2012 Aurora mass shooting focused more on individual- than societal-level issues, as compared to previous media coverage of mass shootings. They speculated that news media adopt episodic frames to cover individual events based on the assumption that the audience already has a baseline familiarity with the ongoing debate about gun violence.

Researchers hold distinct views about the relative effects of episodic and thematic framing, and empirical findings are mixed. Iyengar (1996) argued that episodic framing tends to blame individuals for the issue, thus shielding society and government from responsibility. Thematic framing does the opposite. For example, when news media cover poverty episodically, the "blame" for being poor would be directed at individuals. With more thematic coverage of poverty, however, broader societal factors are centered. Empirically, researchers found that thematic framing has the effect of increasing public support for public policy solutions to issues like climate change (Hart, 2011) and social security (Springer & Harwood, 2015).

Other researchers found that stories with an episodic frame are more powerful in stimulating emotional responses, which could in turn more powerfully influence public opinion. For example, episodic framing of stories about mandatory minimum sentences elicited more

empathy, which was related to opposing the practices more (Gross, 2008). This is because episodically framed stories often touch on a broader issue using "common" individuals as "exemplars" (Boukes et al., 2015). Similarly, Aarøe (2011) found that episodic framing's effectiveness increased with the intensity of emotions elicited by the frame. In contrast, thematic frames in some instances decreased the audience's emotional involvement in a story.

It is important to reiterate that framing effects research often examines opinion change (e.g., whether gun laws should be stricter). This may rely on both news reasoning and emotional arousal, which might explain the mixed findings about the relative power of episodic and thematic frames. The current analysis centers on whether episodic or thematic framing makes a more compelling argument to persuade the audience that gun violence is an important issue to consider in the first place. Based on the emotion mechanism, episodic, rather than thematic, framing should have a stronger impact in increasing the public salience because it can elicit emotional responses. Considering the context, this media effect should be particularly noticeable with regard to enduring public affairs issues in a polarized political environment where people often hold strong pre-existing beliefs and thus are more susceptible to emotional elements in the media rather than ideas and arguments (Weeks, 2015), as a thematic frame will entail. Taken together, we present the core hypothesis of this study: *Episodic framing is a compelling argument that increases the public salience of enduring public affairs issues particularly in a polarized political environment.* We first test the baseline agenda-setting effect and then examine the compelling argument hypothesis.

H1: Exposure to gun violence in the mainstream news media will increase the perceived importance of the issue by the public.

H2: Exposure to episodic—but not thematic—coverage of gun violence in the mainstream news media will increase the perceived importance of the issue by the public.

Agenda-setting theory, including the compelling arguments hypothesis, may provide different explanations for different audiences. In a polarized political environment, a compelling argument to conservatives might not resonate with liberals, and vice versa. Research shows that, compared to conservatives, liberals both want to and do feel more empathy toward others (Hasson et al., 2018). Therefore, it is likely that episodic framing of gun violence would be more effective on liberals than on conservatives. On the other hand, a ceiling effect is possible because if one already perceives an issue to be important at the outset, exposure to media content would only marginally increase the issue's public salience. Given that public opinion polls consistently show liberals are more likely than conservatives to believe gun violence is an important issue (Dam, 2018), it is reasonable to assume that any type of agenda-setting effect should be stronger on conservatives. Due to the lack of prior literature, we ask:

RQ1: To what extent does political orientation moderate the relationship between exposure to mainstream media coverage of gun violence and the perceived issue importance by the public?

RQ2a-b: To what extent does political orientation moderate the relationship between exposure to episodic (a) and thematic (b) coverage of gun violence in the mainstream media and the perceived issue importance by the public?

Beyond the effect of mainstream media, partisan media's influence may further explicate causes of opinion polarization.

Partisan Media and Agenda Setting

Selective exposure suggests that individuals actively seek out information to reinforce their existing views (Stroud, 2011). This is because people tend to prefer messages that are aligned with their own beliefs and avoid challenging information (Festinger, 1962). Applied to a polarized media environment, scholars have found that citizens are more likely to expose themselves to like-minded partisan media (Wicks, Wicks, & Morimoto, 2014). However, a preference for opinion-reinforcing political information does not always co-exist with systematic avoidance of opinion challenges (Garrett, 2009). In fact, mainstream news outlets still comprise most people's media diets, and Republicans and Democrats have similar political media repertoires (Weeks, Ksiazek, & Holbert, 2016).

Regardless of one's media diet, the impact of partisan media appears to be significant. Research consistently shows that exposure to pro-attitudinal partisan media influences political attitudes, which ultimately contributes to political polarization (Levendusky, 2013; Stroud, 2010). For people who are engaged in cross-cutting media exposure, they also tend to be influenced by pro-attitudinal partisan media to a larger extent than other media sources (Garrett, Weeks, & Neo, 2016). This effect could be due to selective perception, a tendency to process media messages based on one's partisan preference (Schmitt, Gunther, & Liebhart, 2004).

Examining the impact of partisan media in agenda-setting research is important. When partisan media are powerful in shaping different issue priorities and opinions among their followers, a unified sense of community is at stake. However, the literature on the agenda-setting effects of pro-attitudinal partisan media on partisans—termed as "selective agenda setting" in this paper—is underdeveloped. Stroud (2011) observed that conservative and liberal media could determine the issue priorities for conservatives and liberals respectively, but the conclusion was based on indirect evidence. Recently, researchers did find that exposure to partisan media

significantly influenced how people perceived a particular issue (Hyun & Moon, 2016; Muddiman, Stroud, & McCombs, 2014), but the selective agenda-setting effect has not been established. This study seeks to extend this line of research by contributing more empirical evidence and, more importantly, by incorporating the compelling arguments hypothesis. As argued above, it is important to understand what kind of media coverage is effective in making an issue prominent on the public agenda. Here we further expect that the compelling arguments effect should be strengthened when considering partisan selectivity in this polarized media environment. We first examine the baseline selective agenda-setting effect, and then test the compelling arguments hypothesis:

H3: Exposure to gun violence in the pro-attitudinal partisan media will increase the perceived issue importance among partisans.

RQ3a-b: How will exposure to episodic (a) and thematic (b) framing of gun violence in pro-attitudinal partisan media influence the perceived issue importance among partisans?

Method

This study examines the compelling arguments hypothesis and selective agenda setting at the individual level based on a matching strategy that pairs content analysis of media messages and a two-wave panel survey (Rössler, 1999; Shehata & Strömbäck, 2013). This method is advantageous because, first, it considers each respondent's specific media diet and exposure. Second, the use of panel data captures the amount of opinion change between the first and second survey waves, providing more evidence for causal inference.

In doing the individual-level analysis, an ideal approach is to content analyze all media outlets used by each respondent and then compare the results with their issue agenda. However, analyzing the thousands of media outlets' content is challenging. This methodological constraint

explains why existing studies of this kind examined only a select few media outlets (Hyun & Moon, 2016; Muddiman et al., 2014), or turned to other more manageable proxies (Stroud, 2011). The media landscape is even more complex today when people consume news across a variety of media platforms. For example, one may listen to NPR on their commute, check out NPR's website at work, and receive its social media notifications. The ideal approach would mean measuring each respondent's exposure to each of the media sources from multiple platforms. This is almost impossible for a self-reported survey because of recall error and the negative effect of a lengthy survey questionnaire on response rate and quality.

This study's approach at least partially address these limitations and advance previous literature methodologically. The survey asked each respondent to report the frequency of consuming news from a particular media source (e.g., NPR) without specifying media platforms. Individual use of different media platforms were then included as control variables. To match the survey data, this study relies on an online media dataset and a computational analysis approach to examine news coverage from each media outlet's website. The assumption is that the same media outlet should offer similar content across platforms and that news websites should provide the most comprehensive archive, thus best representing the media's overall agenda. Importantly, the computational analysis makes it possible to process a large amount of media data from various media outlets, which better reflects the diversity of media choices and audience preferences in today's media environment.

Media Agenda: A Computational Analysis. The content analysis results are from a larger project, which examines gun violence coverage throughout 2018. Based on the synthesis of a number of sources, a list of 25 traditional and emerging media outlets was created and categorized into mainstream, conservative, and liberal (see Appendix A). The sources we drew

on include both perspectives from the consumers of the media themselves (e.g., Mitchell et al., 2014; Media Cloud, n.d.) as well as analysis from content experts who have systematically analyzed media partisanship (Otero, 2019).

News articles were retrieved using Crimson Hexagon's ForSight platform. Based on the literature review and a preliminary review of the data, we created an initial list of keywords to identify relevant news headlines. Several rounds of testing examined the precision and recall of the searched results, while considering the trade-off between the two (Lacy, Watson, Riffe, & Lovejoy, 2015). The final keywords are: gun OR firearm OR nra OR "2nd amendment" OR "second amendment" OR AR15 OR "assault weapon" OR rifle OR "brady act" OR "brady bill" OR "shooting." This keyword list reaches a precision of 95.2% and a recall of 87.0% when tested on 1,000 news headlines. The search returned 42,917 articles from 2018.

In computational text analysis, human coders often label a sample of text documents, and the annotations are used to train a machine-learning model. In this study, a random sample of 2,392 articles was drawn for manual content analysis to develop human coding labels for the articles' headlines. Media framing researchers often identify and measure frames in news headlines, which are seen first and can determine the perception of the following text (Tankard, 2001). Two communication students were trained to code two binary variables: whether a news article is indeed about gun violence, and whether the article employs an episodic or a thematic frame. Specifically, an episodic news headline focuses on one incident or an individual's story related to gun violence; a thematic news headline focuses on the issue of gun violence as an ongoing problem or discusses incidents in a broader thematic context: e.g., "Parkland school shooting leads to new Vermont gun laws." The intercoder reliability on a random sample of 200

news headlines reaches 0.97 Krippendorff's α for relevance and 0.87 α for the frame type. The coders then coded the rest of the data.

Based on the human labeled data, we then used the recently proposed machine learning model—Bidirectional Encoder Representation from Transformers (BERT; Davlin, Chang, Lee, & Toutanova, 2018)—to predict relevance and frames for the remaining news headlines. The BERT model is pre-trained on a deep neural network of a large text corpus (i.e., Wikipedia pages and books) and produces embeddings (i.e., vectors of numbers) to represent the meaning of sentences considering the relationships between words and communication context. This is superior to other text classification models that process each word separately. Computer scientists have fine-tuned BERT by adding prediction schemes to continue supervised machine learning on a variety of specific tasks (Davlin et al., 2018). Put simply, the machine first obtains some knowledge from BERT about how to classify texts. Then learning the human categorizations further improves the classification accuracy.

In this study, we input the news headlines into BERT and then fine-tuned the model for our own analysis by adding the two prediction schemes (1, relevance; 2, episodic vs. thematic frame) on neutral network classification on top of each model respectively. Based on a 10-fold cross validation, the model to predict relevance reaches 0.93 precision and 0.95 recall. The model to predict episodic and thematic frames reaches 0.95 precision and 0.89 recall. The two models were then used to predict the relevance and frames for the remaining news headlines in our dataset. A total of 4,823 news headlines from the 25 media outlets were included in the analysis, and 4,338 (89.9%) of them were predicted as relevant. As for framing differences, mainstream media are significantly more likely to use episodically framed headlines (55.3%)

than conservative (48.9%) and liberal media (35.7%): χ (2) = 8.44, $p < .05$. See Appendix A for each media outlet's employment of episodic and thematic frames.

Public Agenda: A Panel Survey. A two-wave national panel study was conducted during the 2018 U.S. midterm elections. Both waves of the survey were administered by Qualtrics, a U.S.-based international survey firm, which provides a survey technology platform and partners with over 20 online panel providers to supply a network of diverse, quality respondents. Quotas on gender and age were specified so that the sample matches the distribution of these characteristics in the U.S. national population; the demographics of our final sample closely match the general U.S. population in terms of age, gender, and race but are slightly more educated and wealthier (U.S. Census Bureau, 2017). Descriptive statistics of all variables can be found in Appendix B. The first wave of data collection (W1) took place between October 2nd and 19th, when 2,017 respondents completed the survey questionnaire. The second wave (W2) was conducted between November 14th and December 4th. A total of 1,039 respondents returned and completed the survey, resulting in a 51.5% return rate.

Perceived Issue Importance. Respondents in both waves were asked to evaluate the importance of gun violence based on a seven-point scale, with 1 being "not important at all" and 7 "extremely important." The perceived issue importance recorded in W2 was the dependent variable for each model, while the response in W1 was used as a control. In other words, the models estimate the impact of media exposure on the *change* in perceived issue importance between W1 and W2.

Issue and Frame Exposure Indices. Drawing upon the matching procedure to measure individual level agenda-setting effects (Rössler, 1999; Shehata & Strömbäck, 2013), indices of issue and frame exposure were created for each individual respondent by taking into account the

person's specific media use. The *issue exposure index* was calculated for each respondent with each specific media outlet and then aggregated based on the three media types (mainstream, conservative, and liberal). Specifically, for each respondent, the salience of gun violence in each news outlet—measured as the number of gun violence articles published between the two waves of the survey—was multiplied by the respondent's reported frequency using that media outlet (0 = Never, 0.25 = Rarely, 0.50 = Sometimes, 0.75 = Often, 1 = Always). The date range for news exposure varies by respondent because each completed the survey's two waves on different dates. For example, if a respondent completed the first and second waves on October 2nd and December 4th, the analysis would consider his or her media exposure between October 3rd and December 3rd. Then for each respondent the 25 products (e.g., number of gun violence articles published in the *New York Times* × frequency of reading the *New York Times*), were added based on each of the three media types (i.e., 13 mainstream media sources, 5 conservative media sources, 7 liberal media sources) and averaged. That is, the issue exposure index captures the likelihood of every individual respondent being exposed to the gun violence issue in a certain media type during a certain time period. The frame exposure indices were created in a similar way. The *episodic framing exposure index* considers the salience of episodically framed news articles measured in each media outlet and each respondent's media use. The same was done for the *thematic framing exposure* index.

Media Use. The respondents' news consumption patterns were included as control variables. We asked the respondents to report their frequency of getting news from printed newspaper, printed news magazine, television news, and radio. Similarly, online news consumption was computed by respondents' self-reported frequency of using online news websites and news apps. Informational use of social media was measured based on respondents'

use of Facebook, Twitter, Reddit, YouTube, Snapchat, and Instagram for getting news (Cronbach's α= 0.85). The six items were averaged to construct one single index. All of the measurements were based on a 5-point Likert scale (1 = Never, 5 = Always).

Political Orientation. The study measures the respondents' political orientation by asking, "when it comes to politics and public affairs, where would you place yourself on a scale of 0-10, where 0=Strong liberal (left-leaning) and 10=Strong conservative (right-leaning)?"

Other Control Variables. In addition to the above control variables, the analysis also accounts for the effect of *political interest* (e.g., Ardèvol-Abreu & Gil de Zuniga, 2017) by averaging two items based on a five-point Likert scale, with 1 being "strongly disagree" and 5 "strongly agree": "I'm interested in information about what's going on in politics and public affairs" and "I pay close attention to information about what's going on in politics and public affairs." Each respondent's *gun ownership* and *prior experience with guns* were also controlled. Finally, demographic variables include *gender*, *age*, *education*, *race/ethnicity*, and *income*.

*Data Analysis***.** Drawing upon previous individual-level agenda-setting research (Shehata & Strömbäck, 2013), this study used a hierarchical autoregressive model to examine the impact of mainstream media exposure between W1 and W2 on perceived issue importance in W2, controlling for its prior level in W1 (H1-2). The autoregressive model is appropriate because agenda setting is a cumulative effect (Son & Weaver, 2006). By keeping an issue on the agenda for some time, the media communicate to the public that the issue is worth thinking about. In our study, respondents' average time span between the survey's two waves is 40 days, corresponding to the optimal time lag found in earlier studies (e.g., Wanta & Hu, 1994). That is, we test whether the repeated exposure to certain media coverage over a few weeks is related to change in perceived issue importance.

To answer RQ1-2, interaction terms that consider the interaction between each mainstream media exposure index and political orientation were added to investigate how the effects might vary by audience types. The same autoregressive model was used on conservatives and liberals separately for H3 and RQ3. Respondents who scored 0-3 on the 10-point scale of political orientation were categorized as liberals (N=263) and those who scored 7-10 were considered conservatives (N=365).

Results

This study examines the compelling arguments hypothesis and selective agenda setting with the gun violence issue in the United States. Table 1 summarizes the results of mainstream media's effect. To establish the baseline agenda-setting effect, results show that more exposure to gun violence coverage in the mainstream media indeed made people believe the issue was more important (Model 2a: $\beta = .101$, $p < .05$), accounting for prior levels of perceived issue importance. H1 is supported. H2 is not supported, though: exposure to mainstream media's episodic or thematic framing of gun violence did not change one's perceived issue importance.

<Insert Table 1 here>

In addressing RQ1, political orientation significantly moderated the relationship between mainstream media exposure and perceived issue importance. As Figure 1a shows, compared to liberal and politically neutral respondents, conservatives were more likely to be influenced by the mainstream media (Model 2b: $\beta = .137$, $p < .05$). That is, exposure to mainstream media made conservatives perceive gun violence as a more important issue more so than other respondents.

<Insert Figure 1 here>

The picture fills out when delving into the compelling arguments effect (RQ2a-b): conservatives appeared to be more responsive to mainstream media's episodic framing of gun

violence than liberals and politically neutral respondents. As Figure 1b illustrates, exposure to episodically framed mainstream news coverage of gun violence bridged the gap between liberals and conservatives in terms of their perceived importance of the issue (Model 3b: β =.144, p <.05). In fact, exposure to mainstream media's episodic framing of gun violence had a significant impact in making conservatives believe the issue was more important (β =.602, p <.01; see Model 7b in Table 2). In contrast, mainstream media's thematic framing decreased the issue importance among liberal-oriented respondents to a greater extent than the rest of the population (Model 3c: β =.121, p < .05; also see Figure 1c).

H3 and RQ3a-b examine the selective agenda-setting effect (see Table 2). Results show that neither exposure to conservative nor liberal media significantly increased the perceived issue importance among their respective partisans. H3 is not supported.

<Insert Table 2 here>

To address RQ3a-b, neither exposure to episodically nor thematically framed coverage in pro-attitudinal media increased gun violence salience among partisans. Notably, the more conservatives were exposed to their pro-attitudinal media's episodic framing, the less likely they were to consider the gun violence important (Model 7b: β = -.210, p < .01).

Discussion

Drawing upon the literature of compelling arguments and partisan media, this study examines the impact of different news media on U.S. public opinion about an important and highly polarized issue: gun violence. It is important to define *a priori* what constitutes a compelling argument; here, we posit that episodic framing should serve as a compelling argument because its emotional appeal. Although the study does not find support for this specific compelling argument hypothesis among the general public, it does show that mainstream

media's episodic framing of gun violence significantly increased the issue salience among conservatives. Exposure to episodically framed coverage of gun violence in their like-minded media, however, made conservatives believe the issue was less important. The study sheds light on whether, as well as what kind of, media coverage makes gun violence a more or less prominent issue on different publics' agendas. It also makes several theoretical and methodological contributions.

One of the most important research findings is that mainstream media's agenda-setting power, and the compelling arguments effect in particular, differed across political orientations. This finding provides empirical support for our hypothesis about episodic framing as a compelling argument. Episodically framed news focusing on concrete gun violence incidents or individuals' stories were effective in setting at least one public's agenda because the frame is emotionally engaging (Gross, 2008; Aarøe, 2011). Exposure to thematically framed news of gun violence did not have any agenda-setting effect perhaps because of the frame's lack of emotional appeal. This might also be because many Americans are familiar with the ongoing political debate about gun violence (Holody & Daniel, 2017), or have even become tired of it. As such, thematically framed coverage on broad concerns about or solutions for the issue, rather than reports of concrete incidents and stories, may not simulate much interest.

Second, our study suggests that the compelling arguments effect of mainstream media influenced conservatives but not liberals. The finding can be first explained by the ceiling effect. Consistent with public opinion polls (Dam, 2018), our data shows that liberals already believed gun violence was a very important issue in the survey's first wave (M=6.30, SD=0.86). Conservatives' perceived issue importance was significantly lower (M=5.77, SD=1.10), thus allowing more room for media's agenda setting. Relatedly, the finding speaks to the previous

research that media messages are more persuasive for issues of low-importance (Lecheler, de Vreese, & Slothuus, 2009). When people already believe an issue is important, it is easy to access and retrieve their own thoughts and attitudes about the issue. In terms of agenda-setting research, these people may have less need for orientation (Weaver, 1980), rendering them less susceptible to the media effect. Gun violence is primarily a progressive issue; liberals want to upend the status quo, take action to "solve" the problem. The conservative stance is more defensive, so gun violence is of relatively low importance for conservatives, who may not have "sufficient" information about the issue. When confronted with new information and discourse from mainstream media, conservatives, compared to liberals, may not as easily access stored information to defend their own position about gun violence. As a result, exposure to mainstream media may compel them to give the issue more consideration, thus increasing the issue salience in their minds. Similar to our study, Haider-Markel and Joslyn (2001) found that, when exposed to alternative arguments, Republicans changed their opinions about concealed carry gun laws. Notably, the media effect is significant through an episodic—not a thematic—frame, which suggests that in a polarized environment, partisans' strong opinions about an issue inure them more to ideas and arguments than emotions in the news (Weeks & Garret, 2015). It could also be that, compared with thematically framed articles, episodically framed ones present attitude-challenging beliefs with more subtlety, thus mitigating any partisan motivated reasoning process that might shield conservatives from mainstream and counter-attitudinal media's influence.

While little evidence is found for the selective agenda-setting effect, the research indicates that pro-attitudinal media may exhibit an *agenda-deflating* effect (Schoenbach & Semetko, 1992). For conservatives, greater exposure to conservative media's episodic framing of gun violence decreased the perceived issue importance. While exposure to alternative

information in the mainstream media may prompt conservatives to more consciously deliberate on an issue, exposure to familiar information in conservative media can have the opposite effect (Chong & Druckman, 2007). People form opinions based on new information, which is probably not provided by like-minded media. Associative issue ownership, which refers to a political group's identification with an issue (Walgrave, Lefevere, & Tresch, 2012) offers another possible explanation. Conservative media may deem gun violence a progressive, liberal-owned issue and thus frame gun violence as an issue that should not take priority over others. Additionally, it was conservative media's episodic framing that had the significant effect on issue importance, which again speaks to its emotional appeal, though in the opposite direction. Taken together, episodic framing can serve not only as a compelling argument but also a compelling *counter*-argument depending on the media's intention. In this light, the study offers some new considerations for studying this highly partisan media environment. For some issues such as the one analyzed here, future research should focus not solely on selective agenda *setting*, but also on how partisan media "deflate" the agenda, thus further polarizing opinion.

Lastly, the finding that exposure to mainstream media's coverage of gun violence decreased issue salience among liberals (β = -.197, $p < .05$) is intriguing. Given that mainstream media exposure is strongly associated with liberal media exposure (see Appendix C), it may be that liberals are already more familiar than conservatives with the mainstream media's discourse. As such, liberals may not learn much new information from mainstream media, thus showing no agenda-setting effect. Neither episodic nor thematic framing served as a compelling counter-argument for liberals, which suggests that they may be susceptible to different frames that were not examined here. For example, mainstream media may emphasize the mental health aspect,

thus making liberals believe gun violence is more of a public health issue than anything else. Examining alternative frames as compelling arguments presents a direction for future research.

Overall, this study suggests that mainstream media still have agenda-setting power in this high-choice media environment, at least at the individual level. Despite the recent attacks on the mainstream media and the public's declining faith in the press, our research shows that people who are exposed to mainstream media are still susceptible to its agenda-setting effect. Further, exposure to mainstream news media may also help reduce political polarization to a certain degree. Taken together, our results reveal nuanced agenda-setting effects that are contingent on not only individuals' partisanship and that of the media sources they consume, but also on the type of coverage to which they are exposed. In addition to specific findings, this study makes a meaningful theoretical contribution. By suggesting episodic framing as a compelling argument for the coverage of enduring public affairs issues in a polarized political environment, the study sharpens the compelling arguments hypothesis by shedding light on what constitutes a compelling argument in what context. Findings further suggest that the concept can be better articulated by elaborating on episodic framing as a compelling argument *for whom*. Future research should continue this line of research by explicating how other frames can serve as compelling arguments.

Methodologically, using the matching strategy to measure agenda setting at the individual level combined with the state-of-the-art BERT model makes it possible to analyze media effects while taking into account the large diversity of individuals' media diets. This study considers not only mainstream news media, but also a number of traditional and emerging partisan media outlets. Therefore, results of the study better reflect this rapidly changing, high-choice media

environment. In addition, the use of panel data more effectively measures opinion change over time, which is better for making causal inference.

The results should be interpreted with the following limitations in mind. Like any other individual-level agenda-setting research, media exposure was estimated, so it was not possible to capture each respondent's media exposure across all media platforms in a precise manner. Second, because of the focus on episodic versus thematic frames, the study did not specify media content within each frame. For example, some episodically framed news stories may be straight reporting of gun violence incidents while others may present individuals' stories. Future research should delve into the nuances of media frames and further enrich the concept of compelling arguments. Lastly, all the effects found in the study are limited to one issue—gun violence. Future research could consider replicating our approach and examine media effects related to other important issues in the U.S. and beyond.

References

Aarøe, L. (2011). Investigating frame strength: The case of episodic and thematic frames. *Political Communication*, *28*(2), 207–226.

Aizenman, N. (2018, November 9). Deaths from gun violence: How the U.S. compares with the rest of the world. Retrieved from NPR website: https://www.npr.org/sections/goatsandsoda/2018/11/09/666209430/deaths-from-gun-violence-how-the-u-s-compares-with-the-rest-of-the-world

Ardèvol-Abreu, A., & Gil de Zuniga, H. (2017). Effects of editorial media bias perception and media trust on the use of traditional, citizen, and social media news. *Journalism & Mass Communication Quarterly, 94*(3), 703-724.

Bas, O., & Grabe, M. E. (2015). Emotion-provoking personalization of news: Informing citizens and closing the knowledge gap? *Communication Research*, 42(2), 159-185.

Boukes, M., Boomgaarden, H. G., Moorman, M., & de Vreese, Claes. H. (2015). Political news with a personal touch: How human interest framing indirectly affects policy attitudes. *Journalism & Mass Communication Quarterly*, *92*(1), 121–141.

Chong, D., & Druckman, J. N. (2007). A theory of framing and opinion formation in competitive elite environments. *Journal of Communication, 57*(1), 99-118.

Dam, A. V. (2018, May 31). The surprising way gun violence is dividing America. *The Washington Post*. Retrieved from https://www.washingtonpost.com/news/wonk/wp/2018/05/31/the-surprising-way-gun-violence-is-dividing-america/?noredirect=on&utm_term=.cd6836599471

Davlin, J., Chang, M.-W., Lee, K., & Toutanova, K. (2018). *Bert: Pre-training of deep bidirectional transformers for language understanding*. arXiv preprint arXiv:1810.04805.

DeFoster, R., & Swalve, N. (2018). Guns, culture or mental health? Framing mass shootings as a public health crisis. *Health Communication*, *33*(10), 1211–1222.

Entman, R. M. (2003). Cascading activation: Contesting the White House's frame after 9/11. *Political Communication*, *20*(4), 415-432.

Festinger, L. (1962). *A theory of cognitive dissonance*. Stanford University Press.

Garrett, R. K. (2009). Politically motivated reinforcement seeking: Reframing the selective exposure debate. *Journal of Communication*, *59*(4), 676–699.

Garrett, R. K., Weeks, B. E., & Neo, R. L. (2016). Driving a wedge between evidence and beliefs: How online ideological news exposure promotes political misperceptions. *Journal of Computer-Mediated Communication*, *21*(5), 331–348.

Ghanem, S. (1997). Filling in the tapestry: The second level of agenda setting. In Maxwell McCombs, D. Shaw, & D. Weaver (Eds.), *Communication and democracy: Exploring the intellectual frontiers in agenda-setting theory* (pp. 3–14). New Jersey: Lawrence Erlbaum Associates.

Gross, K. (2008). Framing persuasive appeals: Episodic and thematic framing, emotional response, and policy opinion. *Political Psychology*, *29*(2), 169–192.

Haider-Markel, D. P., & Joslyn, M. R. (2001). Gun policy, opinion, tragedy, and blame attribution: The conditional influence of issue frames. *Journal of Politics*, *63*(2), 520–543.

Hart, P. S. (2011). One or many? The influence of episodic and thematic climate change frames on policy preferences and individual behavior change. *Science Communication*, *33*(1), 28–51.

Hasson, Y., Tamir, M., Brahms, K. S., Cohrs, J. C., & Halperin, E. (2018). Are liberals and conservatives equally motivated to feel empathy toward others? *Personality and Social Psychology Bulletin*, *44*(10), 1449–1459.

Holody, K. J., & Daniel, E. S. (2017). Attributes and frames of the Aurora shootings: National and local news coverage differences. *Journalism Practice*, *11*(1), 80–100.

Hyun, K. D., & Moon, S. J. (2016). Agenda setting in the partisan TV news context: Attribute agenda setting and polarized evaluation of presidential candidates among viewers of NBC, CNN, and Fox News. *Journalism & Mass Communication Quarterly*, *93*(3), 509–529.

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues.* University of Chicago Press.

Iyengar, S. (1996). Framing responsibility for political issues. *The Annals of the American Academy of Political and Social Science*, *546*(1), 59–70.

Jones, J. M. (2018, March 14). U.S. preference for stricter gun laws highest since 1993. Retrieved from Gallup website: https://news.gallup.com/poll/229562/preference-stricter-gun-laws-highest-1993.aspx?g_source=link_newsv9&g_campaign=item_232487&g_medium=copy

Kiousis, S. (2005). Compelling arguments and attitude strength: Exploring the impact of second-level agenda setting on public opinion of presidential candidate images. *The Harvard International Journal of Press/Politics*, *10*, 3–27.

Lacy, S., Watson, B. R., Riffe, D., & Lovejoy, J. (2015). Issues and best practices in content analysis. *Journalism & Mass Communication Quarterly*, *92*(4), 791-811.

Lecheler, S., de Vreese, C., & Slothuus, R. (2009). Issue importance as a moderator of framing effects. *Communication Research, 36*(3), 400-425.

Levendusky, M. (2013). Partisan media exposure and attitudes toward the opposition. *Political Communication*, *30*(4), 565–581.

McCombs, M. (2014). *Setting the agenda* (2nd ed.). Cambridge, UK; Malden, MA: Polity Press.

Media Cloud. (n.d.). Source manager. Retrieved from https://sources.mediacloud.org/#/home

Mitchell, A., Gottfried, J., Kiley, J., & Matsa, K. E. (2014). Political polarization & media habits. Retrieved from Pew Research Center website: http://www.journalism.org/2014/10/21/political-polarization-media-habits/

Muddiman, A., Stroud, N. J., & McCombs, M. (2014). Media fragmentation, attribute agenda setting, and political opinions about Iraq. *Journal of Broadcasting & Electronic Media*, *58*(2), 215–233.

Newhagen, J. E. (1998). TV news images that induce anger, fear, and disgust: Effects on approach‐avoidance and memory. *Journal of Broadcasting & Electronic Media, 42*(2), 265-276.

Otero, V. (2019, August). Multi-analyst rating project white paper. Ad Fontes Media. Retrieved from https://www.adfontesmedia.com/white-paper-multi-analyst-ratings-project-august-2019/

Pew Research Center (2017). The partisan divide on political values grows even wider. Retrieved from Pew Research Center website: http://www.people-press.org/2017/10/05/the-partisan-divide-on-political-values-grows-even-wider/

Pew Research Center (2018). Gun policy remains divisive, but several proposals still draw bipartisan support. Retrieved from Pew Research Center website: http://www.people-

press.org/2018/10/18/gun-policy-remains-divisive-but-several-proposals-still-draw-bipartisan-support/

Reese, S. D. (2001). Prologue: Framing public life: A bridging model for media research. In S. D. Reese, O. H. Gandy, & A. E. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world* (pp. 7–31). Mahwah, NJ: Erlbaum.

Rössler, P. (1999). The individual agenda-designing process: How interpersonal communication, egocentric networks, and mass media shape the perception of political issues by individuals. *Communication Research*, *26*(6), 666–700.

Saldaña, M., & Ardèvol-Abreu, A. (2016). From compelling arguments to compelling associations at the third level of agenda setting. In L. Guo & M. McCombs (Eds.), *The power of information networks: New directions for agenda setting* (pp. 104–118). New York, NY: Routledge.

Schmitt, K. M., Gunther, A. C., & Liebhart, J. L. (2004). Why partisans see mass media as biased. *Communication Research*, *31*(6), 623–641.

Schoenbach, K., & Semetko, H. A. (1992). Agenda-setting, agenda reinforcing or agenda-deflating? A study of the 1990 German national election. *Journalism Quarterly*, *69*, 837–846.

Sheafer, T. (2007). How to evaluate it: The role of story-evaluative tone in agenda setting and priming. *Journal of Communication*, *57*(1), 21–39.

Shehata, A., & Strömbäck, J. (2013). Not (yet) a new era of minimal effects: A study of agenda setting at the aggregate and individual levels. *International Journal of Press/Politics*, *18*(2), 234–255.

Son, Y. J., & Weaver, D. H. (2005). Another look at what moves public opinion: Media agenda setting and polls in the 2000 US election. *International Journal of Public Opinion Research*, *18*(2), 174-197.

Springer, S. A., & Harwood, J. (2015). The influence of episodic and thematic frames on policy and group attitudes: Mediational analysis. *Human Communication Research*, *41*(2), 226–244.

Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication*, *60*(3), 556–576.

Stroud, N. J. (2011). *Niche news: The politics of news choice*. Oxford University Press on Demand.

Tankard, J. W. (2001). The empirical approach to the study of media framing. In S. D. Reese, O. H. Gandy, & A. E. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world* (pp. 95–105). Mahwah, NJ: Lawrence Erlbaum Associates.

United States Census Bureau (2017). American community survey: Demographic and housing estimates. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Walgrave, S., Lefevere, J., & Tresch, A. (2012). The associative dimension of issue ownership. *Public Opinion Quarterly, 76*(4), 771-782.

Wanta, W., & Hu, Y. W. (1994). Time-lag differences in the agenda-setting process: An examination of five news media. *International Journal of Public Opinion Research,5*(3), 250-263.

Weaver, D. (1980). Audience need for orientation and media effects. *Communication Research*,

7(3), 361–376.

Weeks, B. E. (2015). Emotions, partisanship, and misperceptions: How anger and anxiety moderate the effect of partisan bias on susceptibility to political misinformation. *Journal of Communication, 65*(4), 699-719.

Weeks, B. E., Ksiazek, T. B., & Holbert, R. L. (2016). Partisan enclaves or shared media experiences? A network approach to understanding citizens' political news environments. *Journal of Broadcasting & Electronic Media*, *60*(2), 248–267.

Wicks, R. H., Wicks, J. L., & Morimoto, S. A. (2014). Partisan media selective exposure during the 2012 presidential election. *American Behavioral Scientist*, *58*(9), 1131–1143.

Yioutas, J., & Segvic, I. (2003). Revisiting the Clinton/Lewinsky scandal: The convergence of agenda setting and framing. *Journalism & Mass Communication Quarterly*, *80*(3), 567–582.

Table 1. Hierarchical autoregressive regressions about agenda-setting and compelling argument effects

	Model 1a	Model 1b	Model 2a	Model 2b	Model 3a	Model 3b	Model 3c
Block 0 - (autoregressive)							
W1 issue importance	.671***	.564***	.545***	.540***	.544***	.538***	.540***
Block 1 - Baseline variables							
Age		-.019	-.018	-.014	-.021	-.016	-.017
Gender (female)		.033	.033	.032	.033	.032	.032
Education level		-.016	-.020	-.020	-.021	-.021	-.021
Household income		.037	.034	.035	.037	.037	.037
Race (comparing to White)							
Black/African American		.023	.026	.024	.022	.020	.020
Hispanic/Latino		-.007	-.004	-.006	-.005	-.007	-.007
Asian		.012	.012	.010	.009	.007	.007
Native American		-.056*	-.052*	-.051*	-.051*	-.050*	-.051*
Other		-.013	-.014	-.013	-.015	-.013	-.014
News websites use		-.022	-.024	-.022	-.023	-.021	-.021
News apps use		-.018	-.021	-.019	-.018	-.016	-.017
Social media news use		.007	.012	.009	.009	.008	.008
Printed newspaper use		-.014	-.022	-.019	-.023	-.020	-.020
Printed magazine use		.031	.023	.022	.024	.022	.022
TV news use		.072**	.073**	.074**	.071*	.074**	.073*
Radio news use		.011	.013	.017	.014	.017	.017
Gun ownership		−.106***	−.100***	−.101***	−.100***	−.101***	-.102***
Personal relevance to guns		.117***	.118***	.122***	.117***	.122***	.122***
Political interest		-.031	-.032	-.024	-.029	-.020	-.022
Political orientation		-.103***	-.051†	-.127**	-.051†	-.133**	-.115**
Block 2 - Overall exposure							
Mainstream media			.101*	-.012			
Conservative media			-.103**	-.110**			
Liberal media			-.009	-.007			
Block 3 - Overall exposure interaction term							
Mainstream media × Political orientation				.137*			
Block 4 - Frame exposure							
Thematic							
Mainstream media					-.089	-.061	-.156
Conservative media					-.009	-.024	-.029
Liberal media					.123	.131	.137
Episodic							
Mainstream media					.177	.035	.148

Conservative media					-.094	-.085	-.082
Liberal media					-.122	-.131	-.133
Block 5 - Framed exposure interaction terms							
Mainstream episodic × Political orientation						.144*	
Mainstream thematic × Political orientation							.121*
Adjusted R^2 (%)	44.9***	48.3***	49.0***	49.3***	48.9***	49.2***	49.1***
Adjusted $\triangle R^2$ (%)		3.4***	.7***	.3**	.6*	.3*	.2*

Note. † $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$. Cell entries are final-entry ordinary least squares (OLS) standardized coefficients (β).

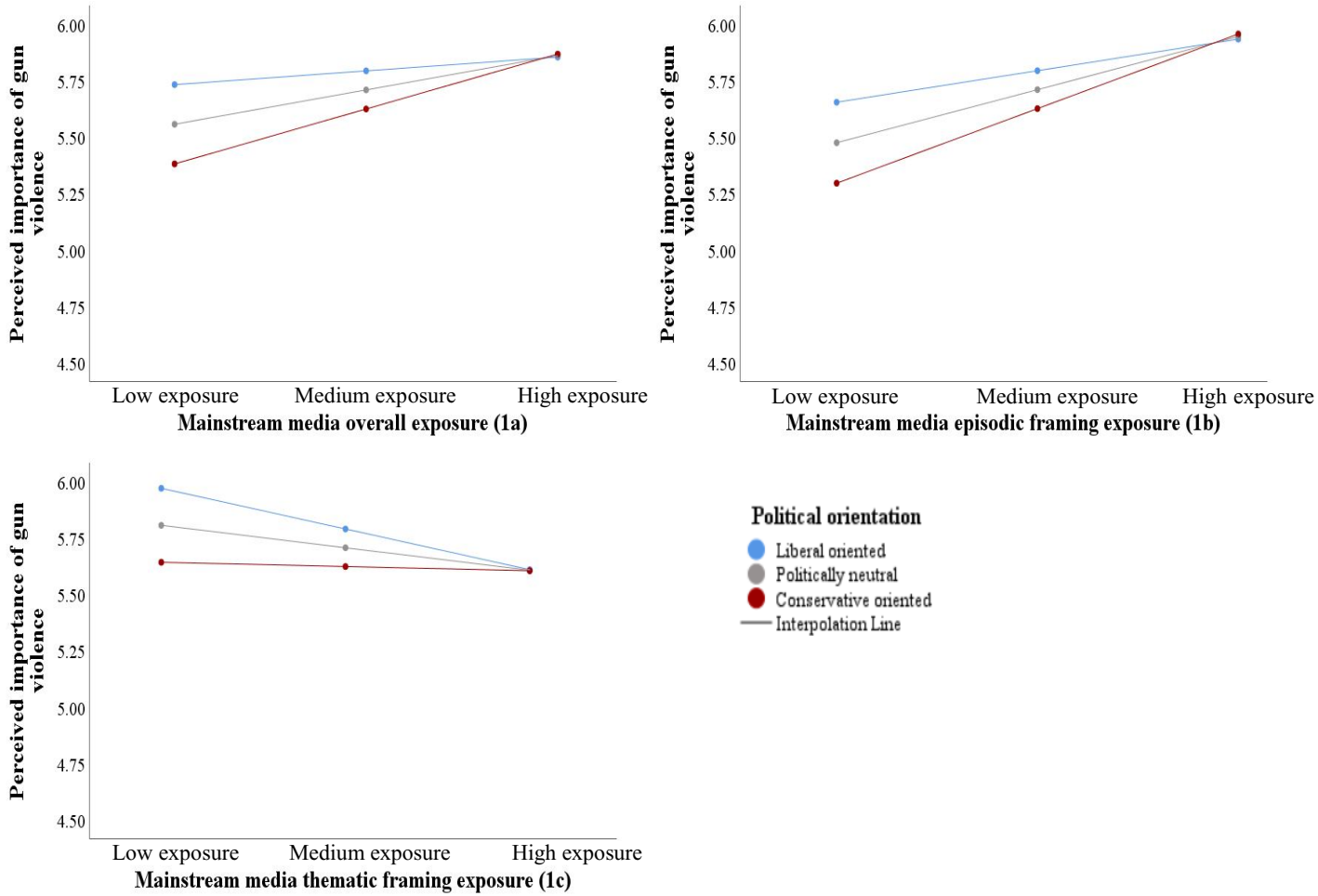
Table 2. Hierarchical autoregressive regressions about selective agenda-setting effects

	Model 4a-b		Model 5a-b		Model 6a-b		Model 7a-b	
	L	C	L	C	L	C	L	C
Block 0 - (autoregressive)								
W1 issue importance	.529***	.649***	.419***	.546***	.420***	.532***	.421***	.523***
Block 1 – Baseline variables								
Age			.025	-.088	.044	-.089†	.045	-.100†
Gender (female)			.010	.029	.008	.029	.005	.022
Education level			.002	-.026	-.007	-.027	-.008	-.033
Household income			.114†	-.011	.134*	.010	.135*	.001
Race (comparing to White)								
Black/African American			-.007	.037	.000	.032	.006	.020
Hispanic/Latino			-.037	.030	-.040	.024	-.041	.021
Asian			.020	.003	.012	.002	.014	-.006
Native American			--	-.041	--	-.040	--	-.040
Other			-.061	.081	-.076	.082†	-.073	.074
News websites use			-.055	-.012	-.048	-.015	-.051	-.017
News apps use			.043	.034	.057	.041	.056	.053
Social media news use			-.040	-.016	.021	-.015	.021	-.019
Printed newspaper use			.087	-.047	.128	-.064	.125	-.060
Printed news magazine use			-.078	-.002	-.073	.014	-.073	.016
TV news use			-.034	.134**	-.011	.130**	-.007	.126*
Radio news use			-.001	.065	.033	.064	.037	.064
Gun ownership			-.066	-.091†	-.054	.085†	-.049	-.090†
Personal relevance to guns			.206***	.077†	.204***	.077†	.202**	.066
Political interest			.114†	-.032	.111	-.021	.110	-.016
Political orientation			-.008	-.060	.003	-.047	.007	-.038

Block 2 - Overall exposure								
Mainstream media					-.197*	.130		
Conservative media					-.072	-.064		
Liberal media					.100	-.082		
Block 3 - Frame exposure								
Thematic								
Mainstream media							-.090	-.518
Conservative media							.095	.202†
Liberal media							.014	-.151
Episodic								
Mainstream media							-.106	.602*
Conservative media							-.162	-.210*
Liberal media							.065	-.069
Adjusted R^2 (%)	27.7***	41.9***	31.8***	44.6***	33.0***	44.7***	32.2***	45.1***
Adjusted $\triangle R^2$ (%)			4.1*	2.7*	1.2†	.8	.4	.7

Note. † < .1. * $p < .05$. ** $p < .01$. *** $p < .001$. L = Liberals; C = Conservatives. Cell entries are final-entry OLS standardized coefficients (β).

Figure 1. Interaction between mainstream media exposure and political orientation



Note. The figures are drawn using the -1SD, Mean, +1SD method. Liberal oriented = 2.47, Politically neutral = 5.29, Conservative oriented = 8.11. In Figure 1a, Low exposure = 7.43, Medium exposure = 31.66, High exposure = 55.88. In Figure 1b, Low exposure = 4.44, Medium exposure = 17.13, High exposure = 29.83. In Figure 1c, Low exposure = 2.88, Medium exposure = 14.52, High exposure = 26.17.