Media attention prior to unexpected events determines their impact on public opinion

Extended Abstract

Our work aims to answer how media agenda before unexpected events shapes the impact of events on public opinion. We study how media attention to immigration issues prior to jihadist terrorist attacks defines the imprint of the attacks on public opinion regarding immigration. The impact of terrorist attacks on public opinion is well-studied (Godefroidt, 2023), however, the moderating role of media discourse received little attention. This is partly because cross-country data capturing media attention is difficult to obtain. In our work, we tackle the issue of media data availability by turning to digital trace data from social media. We compile a multilingual archive of media coverage by collecting data from the official Twitter accounts of the largest national media outlets. We use a combination of traditional sociological data sources and textual digital trace data to complement previous research by studying how media attention to immigration shapes the response of public opinion to high-profile events.

We argue that mass media play an important role in shaping the public response to terrorism even before the attack takes place. This is because high levels of media attention influence how the event will be processed (Zaller, 1992). Media coverage preceding a sudden event can affect publics' response to this event since media discourse can steer collective attention and prime the public to interpret a sudden shock, such as a terrorist attack, in a certain way (Iyengar & Simon, 1993; Roskos-Ewoldsen et al., 2002). Elevated salience of immigration in media, hence, anchors collective attention to immigration issues and primes the public to connect terrorist attacks with immigration (Iyengar and Kinder, 2010). As a consequence, the attacks are likely to make natives' opinions on immigration more negative, especially during times of high media attention to immigration.

We analyze the impact of 15 jihadist terrorist attacks which occurred in Europe between 2014 and 2020 on public opinion on immigration in 19 European countries. Due to the transborder and transnational effects of terrorism (Böhmelt et al., 2020; de Roy van Zuijdewijn & Sciarone, 2019), we study its impact on public opinion across multiple European countries. We use a combination of European Social Survey questions measuring attitudes towards immigration to register the change in public opinion after jihadist attacks (0-10, where 10 indicates the most negative value). The data on terrorist events, including the number of casualties, was obtained from the Global Terrorism Database. We selected 41 national-level media outlets aiming to achieve a politically balanced media coverage for each country and collected the content from the official Twitter accounts published between 2014 and 2022 (6.5M tweets). For every country, we developed a search string to detect immigration-related news in a consultation with a native speaking social scientist.

We leverage an overlap between the timing of 15 jihadist terrorist attacks and the European Social Survey fieldwork as we take on a natural experiment approach to analyse the shifts in public opinion towards immigration. We use the ESS interviews conducted 14 days before the attack as a control group and the observations falling into a 7-day window after an attack as a treatment group, which results in a sample of 19K individuals from 19 countries. We measure media salience of immigration prior to the attack as an average share of immigration-related news over one previous month. To quantify how different levels of media attention to immigration can result in a varying effect of the treatment event on public opinion, we introduce an interaction term between the treatment indicator and media attention in an OLS regression.

Overall, our results support the outlined expectations and show that higher media attention to immigration before an attack amplifies the impact of jihadist terrorism on public opinion (see *Figure 1*). The magnitude of the moderation effect is stronger for the attacks with a higher number of casualties. *Figure 1* displays coefficients for the treatment by terrorist attacks and the interaction between the treatment and the media attention variable. For the attack with 0-1 casualties, we do not observe a significant moderation effect. For the attacks resulting in 2-5 casualties, a 1% above average increase in media attention to immigration prior to the event results in a .39 (.15 + .159) increase in negativity of one's opinion regarding immigration. This effect is comparable to an effect of 3.2 years of education. For the attacks with 6 and more casualties, the opinions become .977 (.332 + .645) more negative on average as media attention becomes 1% above average higher, which is comparable to the effect of 8 years of education.

In sum, our work contributes to understanding the mechanism of unexpected events' impact on public opinion by combining textual digital trace data and traditionally used survey data. We discuss and test the role of media attention in shaping the effects of terrorism on public opinion towards immigration, which was neglected by the previous research due to the lack of data. Understanding publics' response to terrorism is extremely important, as sudden shocks to individuals' views provoke troublesome behavioral outcomes such as an increase in hate speech or hate crimes targeting immigrant communities. Our paper complements previous research studying the heterogeneity of the impact of terrorist attacks on opinions on immigration, and shows the importance of combining digital trace textual data from social media with traditional data sources to make sociological inquiries.

References

Böhmelt, T., Bove, V., & Nussio, E. (2020). Can Terrorism Abroad Influence Migration Attitudes at Home? American Journal of Political Science, 64(3), 437–451.
de Roy van Zuijdewijn, J., & Sciarone, J. (2019). Convergence of the Salience of Terrorism in the European Union Before and After Terrorist Attacks. Terrorism and Political Violence, 0(0), 1–20.
Godefroidt, A. (2023). How terrorism does (and does not) affect citizens' political attitudes: a meta-analysis. American Journal of Political Science, 67(1), 22-38.
Iyengar, S., & Simon, A. (1993). News Coverage of the Gulf Crisis and Public Opinion: A Study of Agenda-Setting, Priming, and Framing. Communication Research, 20(3), 365–383.
Iyengar, S., & Kinder, D. R. (2010). News that matters: Television and American opinion. University of Chicago Press.
Roskos-Ewoldsen, D. R., Roskos-Ewoldsen, B., & Carpentier, F. R. D. (2002). Media Priming: A Synthesis. In Media Effects (2nd ed.). Routledge.
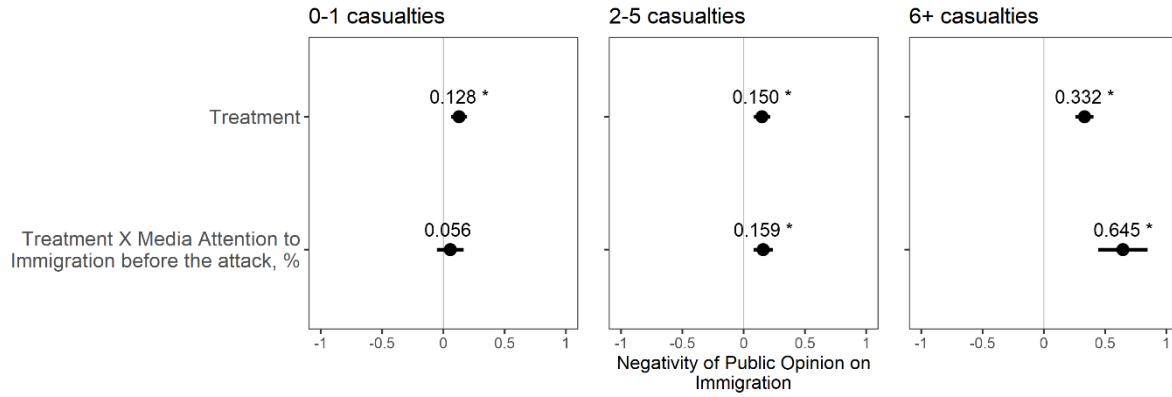Zaller, J. R. (1992). The nature and origins of mass opinion. Cambridge university press.

Figure 1. *The effects of terrorist events on public opinion towards immigration.*
The figure displays OLS regression coefficients for the main effect of the treatment (top line) and the interaction effect with media attention (bottom line). The x-axis captures the magnitude of change in the negativity of public opinion (min = 0; max = 10). N = 19,081; N countries = 19; * p < 0.05; **p < 0.01; ***p < 0.001.