From Violence to Virality: A Quantitative Analysis of Online Conversations Following the 2024 Terrorist Attacks in Germany

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ARTICLE INFO	ABSTRACT
	Terrorist attacks are no longer isolated acts of violence; they are also events that reverberate within an interconnected platform ecosystem, where public discourse is shaped by online narratives and social media engagement. This study provides a quantitative analysis of online conversations following three major terrorist attacks that occurred in Germany in 2024: the Mannheim stabbing (May 31st), the Solingen attack (August 23rd), and the Magdeburg Christmas market incident (December 20th). The research examines engagement levels, keyword frequencies, hashtag usage, and platform-specific trends, offering valuable insights into terrorism-related narratives evolve in digital spaces. Through automated sentiment analysis and keyword tracking, this research highlights how public discourse on terrorism intertwines with broader ideological debates on immigration, security policies, and religious identity. These findings primarily contribute to media studies, specifically focusing on mediatization of terrorism and security crisis, offering insights into how digital ecosystems mediate public reactions to violence. The results underscore the need for responsible media reporting and nuanced policy responses to mitigate the spread of unregulated narratives and stigmatization of minority communities, fostering a more informed public discourse on security and radicalization.

INFO ARTIKEL	ABSTRAK
	Serangan teroris bukan lagi tindakan kekerasan yang terisolasi; melainkan juga peristiwa yang bergema dalam ekosistem platform yang saling terhubung, di mana wacana publik dibentuk oleh narasi daring dan keterlibatan media sosial. Penelitian ini memberikan analisis kuantitatif percakapan daring setelah tiga serangan teroris besar yang terjadi di Jerman pada 2024: penusukan Mannheim (31 Mei), serangan Solingen (23 Agustus), dan insiden pasar Natal Magdeburg (20 Desember). Penelitian ini mengkaji tingkat keterlibatan, frekuensi kata kunci, penggunaan tagar, dan tren spesifik platform yang menawarkan wawasan berharga tentang narasi terkait terorisme yang berkembang di ruang digital. Melalui analisis sentimen otomatis dan pelacakan kata kunci, penelitian ini menyoroti bagaimana wacana publik tentang terorisme terjalin dengan debat ideologis yang lebih luas tentang imigrasi, kebijakan keamanan, dan identitas agama. Temuan-temuan ini terutama berkontribusi pada studi media, khususnya yang berfokus pada mediasi terorisme dan krisis keamanan, yang menawarkan wawasan tentang bagaimana ekosistem digital memediasi reaksi publik terhadap kekerasan. Hasil ini menggarisbawahi perlunya pelaporan media yang bertanggung jawab dan respons kebijakan yang bernuansa untuk memitigasi penyebaran narasi yang tidak diatur dan stigmatisasi terhadap komunitas minoritas, serta mendorong wacana publik yang lebih terinformasi tentang keamanan dan radikalisasi.

INTRODUCTION

Terrorism is a multifaceted phenomenon that has been the subject of extensive academic debate across various disciplines. Its complexity stems from its evolving definitions, the diversity of its manifestations, its profound psychological effects and, ultimately, its deep entanglement with modern media dynamics (Gillani, 2022; Popovic & Kozar, 2023). The digital mediatization of terrorism has radically transformed the way terrorist events are perceived, discussed, and analyzed in the age of internet 2.0. Social media and online platforms now serve as primary arenas where public discourse around terrorist attacks unfolds, shaping narratives, amplifying emotions, and influencing policy responses. This paper aims to examine how online conversations evolve in response to terrorist incidents, focusing on the volume of traffic and discourse surrounding specific keywords related to three major terrorist attacks. By analyzing digital engagement patterns, we seek to understand how terrorism-related content spreads, how users interact with it, and what role algorithmic amplification plays in shaping public reactions (Rafique et al., 2023; Salehian et al., 2025; A P Schmid, 2025).

Before delving into the data analysis, it is crucial to reflect on the broader conceptual landscape of terrorism. The rise of digital platforms has not only changed the way terrorism is reported, perceived, and discussed: it also redefined its very nature. To provide a comprehensive understanding, the following section will examine terrorism through four key lenses: Terrorism is a complex and evolving phenomenon that remains difficult to define universally, as varying historical, political, and ideological contexts influence its interpretation. It manifests in multiple forms, ranging from nationalist and revolutionary movements to religious extremism, right-wing ideologies, lone-wolf actors, and state-sponsored violence. Beyond its physical consequences, terrorism also leaves deep psychological impacts on individuals and societies, fostering fear, anxiety, and social fragmentation. In the digital age, terrorism is increasingly shaped by its mediatization, with traditional and online media playing a central role in framing public perception, influencing policy responses, and amplifying the visibility and impact of terrorist acts. By analyzing terrorism from these four perspectives, we aim to highlight its evolving nature and the interplay between violence, psychology, and media in shaping contemporary security challenges (Correia, 2022; Kisla, 2022).

Defining terrorism remains a challenge, as its meaning evolves depending on historical, political, and social contexts. Schmid (2011, 2023) highlights how terrorism is frequently defined as the use of violence or the threat of violence to instill fear and achieve political, ideological, or religious objectives. But the 2011 Routledge Handbook provides a comprehensive analysis of over 250 definitions of terrorism, illustrating the complexity and contested nature of the term. Laqueur, in *Terrorism* (1977), examined the historical roots of terrorism, identifying it as a recurrent phenomenon in human history, a form of symbolic political violence aimed at instilling fear. Hoffman, in his influential book *Inside Terrorism* (2006), provides a thorough analysis of the motivations and strategies of contemporary terrorist groups, emphasizing how terrorism has become a transnational phenomenon influenced by religious and ideological dynamics. Richardson (2006), in *What Terrorists Want* (2006), explores the motivations and objectives of terrorist groups, highlighting that these actors are not necessarily irrational. These scholars have shaped a foundational understanding of terrorism, focusing on its definitions, historical roots, contemporary dynamics, and the

motivations behind terrorist activities (Iqbal & Shah, 2018; Singh, 2023).

Understanding the recent evolution of terrorism requires examining how scholars have linked it to technology and social media. Sageman, in *Misunderstanding Terrorism* (2017), critiques traditional interpretations of terrorism, arguing that radicalization often occurs organically and is not necessarily linked to centralized organizations. Sageman highlights how the dissemination of extremist ideologies takes place through online social networks, often without centralized control, making counterterrorism efforts more challenging. Similarly, Bloom (2019), in *Small Arms: Children and Terrorism*, examines the use of children as fighters and propaganda tools by terrorist groups, revealing a tragic transformation in contemporary terrorism. Bloom emphasizes how the exploitation of children serves as a cynical strategy to create an image of purity and ensure the continuation of the struggle. Another critical contribution is from Braniff, who, in *Terrorism as a Business* (2021), investigates the economic dynamics of terrorism, illustrating how terrorist organizations function as complex enterprises, managing resources, recruiting members, and generating revenue. Lastly, Byman (2020), in *Road Warriors: Foreign Fighters in the Armies of Jihad*, provides an in-depth analysis of foreign fighters, emphasizing the multifaceted motivations driving them, from ideology to the search for belonging, and the significant security challenges posed by their return.

Terrorism manifests in various forms, distinguished by motivations, objectives, and operational methods. A classic distinction is between nationalist and revolutionary terrorism. Nationalist terrorism is often linked to struggles for independence or autonomy by specific ethnic or national groups. Revolutionary terrorism aims to overthrow existing political and social orders, often driven by broad ideological goals. However, these categories can overlap.

In recent times, religiously motivated terrorism, particularly Islamist terrorism, has gained prominence. This form is characterized by a strong ideological-religious component that justifies violence to achieve perceived sacred objectives. Gunaratna & Jia, in *Terrorism in the Asia-Pacific: Threat and Counter-strategies* (2017), analyze this phenomenon, highlighting its impact in the Asia-Pacific region. Another significant form is right-wing terrorism, rooted in xenophobic, racist, and nationalist ideologies. Neumann (2020), in his article "The Problem of Right-Wing Terrorism", discusses the concerning rise of such attacks targeting ethnic, religious, or political minorities.

Lone-wolf terrorism refers to individuals who operate independently, often driven by extremist ideologies spread through online networks. Spaaij (2010), in "Lone Wolf Terrorism: An Assessment", describes the challenges in preventing and countering such attacks, as these perpetrators are not necessarily affiliated with structured terrorist organizations. The advent of the internet and social media has led to "hybrid" terrorism, combining physical attacks with online disinformation campaigns. Berger, in *Extremism* (2018), examines how terrorist groups utilize online platforms for propaganda and recruitment, reaching a global audience. State-sponsored terrorism involves governments leveraging terrorist groups for political or strategic aims. Pillar (2001, 2016) expands on this concept, emphasizing how historical misinterpretations and geopolitical biases shape the perception and response to state-backed terrorism.

Another crucial distinction in the landscape of terrorism is between "domestic" and "international" terrorism. Domestic terrorism refers to acts of violence occurring within a state's borders, typically perpetrated by groups or individuals residing within the same country, with objectives tied to local political, social, or ideological dynamics. In contrast, international

terrorism involves actors operating beyond their country of origin, often with transnational goals or connections to global conflicts. This distinction is essential to understanding the different dynamics and implications of each type of terrorism.

Jackson (2005), in *Writing the War on Terrorism: Language, Politics and Counter-Terrorism* (2005), analyzes how the language used to describe terrorism shapes public perception and policy responses. Jackson highlights how the rhetoric of the "war on terror" has often led to an oversimplification of terrorism, obscuring the complex motivations behind violence and the various types of terrorism that exist. Thus, any attempt to analyze the public's reactions and interpretation should take into account this connatural connective tendency.

Psychological Impact of Terrorism, the psychological consequences of terrorism are long-lasting, disrupting both individuals and communities well beyond the immediate aftermath of an attack. Beyond physical harm, terrorist attacks instill deep-seated feelings of fear and vulnerability, leading to significant alterations in daily behaviors and mental health challenges. Immediate reactions often encompass shock, anxiety, fear, and confusion. These responses can be exacerbated by the perception of an ongoing threat and extensive media coverage of the incidents. Research indicates that such exposure can result in anxiety disorders, post-traumatic stress disorder (PTSD), and depression. Notably, repeated exposure to news about terrorist acts, even media channels, can lead to "secondary" or "vicarious traumatization", where individuals exhibit symptoms akin to those experienced by direct victims. Factors such as proximity to the event, personal involvement, and individual characteristics, including pre-existing mental health conditions or prior traumatic experiences, can influence the severity of these psychological effects (Galea et al., 2015; Hobfoll et al., 2007; Norris et al., 2008).

On a broader scale, terrorism significantly impacts social and community dynamics. Widespread fear and anxiety can erode social trust, leading to increased isolation and polarization within communities. Terrorist attacks may also fuel hatred and discrimination against specific groups, such as religious or ethnic minorities, thereby escalating social tensions and conflicts. The perception of an ongoing threat can prompt changes in daily routines, including reduced participation in public events or alterations in travel habits. Community resilience, or the ability of a community to recover after traumatic events like terrorist attacks, is influenced by various factors, including social support, available resources, and local leadership. Promoting a sense of safety, calming, self- and community efficacy, connectedness, and hope are identified as essential elements in immediate and mid-term mass trauma interventions. These principles aim to mitigate the psychological impact of terrorism and foster recovery within affected communities.

Mediatization of Terrorism, the mediatization of terrorism significantly amplifies its psychological impact. This process is crucial as narratives can be strategically manipulated to shape public perception of reality and, ultimately, information can be cognitively weaponized. Both traditional and online media serve as primary conduits for news about terrorist attacks, reaching vast audiences in real-time. The rapid spread of terrorist-related content provokes strong emotional reactions, fear, anger, and anxiety, that directly shape public risk perception and trust in institutions. The widespread circulation of graphic images and videos can lead to "secondary traumatic exposure", adversely affecting the mental health of viewers.

Weimann (2015; 1994) expands on this argument, highlighting how digital media and online platforms have fundamentally changed terrorist communication. He explains that modern terrorist organizations leverage social media not only for propaganda but also for recruitment, funding, and operational coordination, making cyberspace a key battleground in contemporary terrorism. Furthermore, social media platforms have transformed the communication and perception of terrorism, enabling the viral spread of content and greater user interaction. This dynamic was evident in the analysis of three attacks in Germany, where social media played a crucial role in shaping the narrative of the events.

The mediatization of terrorism also influences the "social construction" of reality, leading to stereotypes and generalizations that can foster hatred and discrimination against specific groups. Digital media have become strategic tools for terrorist groups (Nacos, 2016), both for the dissemination of propaganda and the recruitment of new members in a rapidly evolving information landscape. And yet, media competition for audience attention often fuels an over-sensationalist coverage of terrorism, distorting public understanding of its complexities. This aspect is particularly relevant to the psychological impact of terrorism, as media narratives of traumatic events can amplify emotional reactions and psychological disorders.

Seib & Janbek (2010) and Stetka & Mihelj (2024) discuss how new media, with their global reach, have created challenges for crisis management and counter-narratives to terrorism. Developing critical awareness of the role of media and the ways in which terrorism is communicated and represented is essential to mitigate negative effects on individual psyche and social cohesion.

The concept of the 'platform society', introduced by Van Dijck et al. (2018), provides a crucial framework for understanding how digital infrastructures, like Facebook, Instagram, YouTube, and X are not merely communication tools, but infrastructures that actively shape how information is produced, disseminated, and consumed. In the case of terrorism, these platforms not only increase the speed and reach of news dissemination but also influence the narrative of events. Platform algorithms foster 'echo chambers' exposing users primarily to content that reinforces their beliefs, deepening polarization. Platforms also facilitate the spread of fake news and propaganda, making it more challenging to distinguish between true and false information, significantly impacting mental health and social cohesion.

Moreover, the platform society has altered the role of traditional media, which now compete with platforms for public attention. The speed and interactivity of platforms have introduced new challenges for journalism, such as the need to verify information in real-time and adapt to digital communication formats. This context has led to an increasing personalization of the media experience, with content filtered and tailored to users' tastes and preferences. This phenomenon can amplify the emotional impact of news on terrorism, creating a spiral of fear and anxiety, especially among those who are more psychologically vulnerable. Platforms have also opened new avenues for user participation in event narratives, through sharing testimonies, opinions, and comments, as seen in the significant amounts of interactions generated following the three attacks in Germany. While this represents an opportunity for the democratization of information, it also raises questions about the quality and reliability of content. A critical understanding of these dynamics is essential to tackling the challenges of

terrorism's mediatization in the platform society. This includes both its psychological impact on individuals and its broader social and political consequences (Neumann, 2020; Van Dijck et al., 2018).

The conceptual examination of terrorism has highlighted its definitional ambiguities, diverse manifestations, psychological repercussions, and evolving relationship with media and digital platforms. In particular, the rise of the platform society has reshaped how terrorist events are framed, disseminated, and debated online, influencing both public perception and policy responses. Building on these theoretical insights, the next section presents an empirical analysis of online conversations surrounding three major terrorist attacks. By examining keyword traffic, engagement patterns, and discourse dynamics across social media platforms, we aim to uncover how digital audiences react to terrorism-related content and how algorithmic amplification affects the visibility and framing of such discussions (Nacos, 2016).

The 2024 Terrorist Attacks in Germany, in 2024, Germany experienced a series of terrorist attacks that garnered significant media attention, each highlighting different aspects of extremist violence and its representation in the media. Building on the theoretical framework discussed in the theoretical framework, the third section will present the results of an empirical analysis of online conversations related to three major terrorist attacks that occurred in Germany between May and December 2024. By analyzing the volume of social media traffic, keyword trends, and engagement patterns, this research seeks to identify sentiment trends that shape public perception on these incidents (Choi, 2024; Xu et al., 2024).

The following paragraphs will provide a contextual overview of the three attacks, outlining their circumstances, media coverage, and societal impact. Media representations played a crucial role in shaping public discourse, often framing the events within broader debates on national security, immigration policies, and radicalization. Notably, scholarly research has repeatedly emphasized the impact of extensive media coverage on the stigmatization of refugee communities (Lajevardi, 2021; International Organization for Migration, 2017) and stressed the importance of nuanced reporting to prevent societal divisions.

The Mannheim Attack (May 31, 2024), On May 31, 2024, in Mannheim, a 25-year-old Afghan refugee fatally stabbed a police officer and wounded five others during an anti-Islam rally. The attack received widespread national and international media coverage, emphasizing the heightened tensions surrounding anti-Islam demonstrations   and the broader challenges of refugee integration. News outlets fueled debates on immigration policies and highlighted the potential for radicalization among both asylum seekers and nationalist movements. CBS News emphasized the direct targeting of individuals associated with far-right movements, as the primary target of the assailant was Michael Stürzenberger, a well-known anti-Islam activist.

The Solingen Stabbings (August 23, 2024), On August 23, 2024, during the "Festival of Diversity" in Solingen, a 26-year-old Syrian refugee carried out a mass stabbing, killing three people and injuring eight others. The Islamic State (ISIS) claimed responsibility for the attack, marking the first such declaration on German soil since 2016. Media coverage was extensive, focusing on the attacker's background, the festival's emphasis on diversity, and the broader implications for Germany's refugee policies. Journalists highlighted the suspect's failed asylum application and the authorities' inability to deport him, fueling public discourse on the

efficiency of immigration controls and the risks associated with failed asylum processes.

The Magdeburg Christmas Market Attack (December 20, 2024), On December 20, 2024, a 50-year-old Saudi doctor drove into a crowd at the Magdeburg Christmas market, killing four women and a nine-year-old boy, and injuring approximately 200 others. The suspect, who had resided in Germany since 2006, was reported to have anti-Islam sentiments and connections to far-right groups. Given the symbolic nature of the attack during a festive season and its tragic parallels to the 2016 Berlin Christmas market attack, media coverage focused on public safety vulnerabilities and the complexities of ideological motivations. The perpetrator's profile, which did not align with conventional narratives of terrorist attacks, further fueled discussions on the evolving nature of extremist violence. These incidents collectively spurred discussions on the balance between security and civil liberties, the effectiveness of integration policies, and the role of media in shaping narratives surrounding terrorism. In summary, media coverage of these attacks played a pivotal role in influencing public discourse, highlighting the need for balanced reporting to inform the public while avoiding the undue stigmatization of specific communities.

METHODS

This study employs a quantitative approach, focusing on the measurement of engagement levels, keyword occurrences, and discourse dissemination patterns across digital platforms. The research focuses on tracking online conversations surrounding three major terrorist attacks in Germany in 2024. Three different datasets were gathered using *Onclusive*, a media monitoring and analytics software, which enabled the extraction and quantification of online discussions from a wide range of open-source digital platforms, including: (1) Social media: Facebook, Instagram, YouTube; (2) Online forums and blogs; (3) News websites.

To ensure a comprehensive temporal analysis, data collection was structured around the following monitoring periods. Mannheim Attack (May 31, 2024): Data collected from May 30 to December 30, 2024. Solingen Stabbings (August 23, 2024): Data collected from July 30 to December 30, 2024. Magdeburg Christmas Market Attack (December 20, 2024): Data collected from November 30 to December 30, 2024.

The research covered the following countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Macedonia, Malta, Monaco, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom. The analysis was conducted using automated data processing techniques to extract key quantitative insights from the collected dataset. The study focused on these followings.

Engagement Metrics: Measuring the volume of posts, shares, likes, and comments related to each attack to identify trends in public interest and fluctuations in digital conversations over time (Hoffman, 2006; Van der Brug & van Spanje, 2023). Keyword Frequency and Co-Occurrence Analysis: Tracking the most frequently used terms, hashtags, and recurring phrases to detect dominant narratives and potential shifts in discourse following each attack. Content Dissemination Patterns: Examining how news articles, social media discussions, and user-

generated content propagated across platforms, highlighting differences in reach and engagement between sources.

This approach allows for a large-scale, objective analysis of how terrorist attacks are discussed online, providing insights into public reaction dynamics, information diffusion, and narrative formation without introducing subjective interpretation.

RESULT AND DISCUSSION

The Mannheim Attack: Social Media Reactions and Keyword Trends, On May 31, 2024, a knife-wielding attacker, identified as Sulaiman A, born in Herat, Afghanistan, resident in the German state of Hesse, targeted attendees at a political rally organized by the civic movement Pax Europa. The timeline of mentions combining the keywords "Mannheim AND Sulaiman", which track conversations containing both the name of the German city and the Afghan attacker, reveals an initial surge in online activity within hours of the incident.

Following the events of May 31, two additional peaks in online discussions were recorded (Fig. 1). The first one, less significant was registered in August, coinciding with the Solingen attack. The second, more pronounced, in December, follows the Magdeburg attack. This recurrence of engagement over time illustrates how news related to high-impact events undergoes a layering effect in public perception, with periodic reactivations of narrative and informative mechanisms driven by subsequent incidents.

The role of social media in shaping public reactions to terrorist attacks is closely linked to collective sense-making mechanisms. Schulz & Wessler (2019) argue that during crises, individuals use digital platforms not only for information retrieval but also as a means of managing uncertainty and reinforcing their existing worldviews. This aligns with the observed fluctuations in engagement levels, as discussions tend to spike immediately after an event and re-emerge when similar incidents occur.
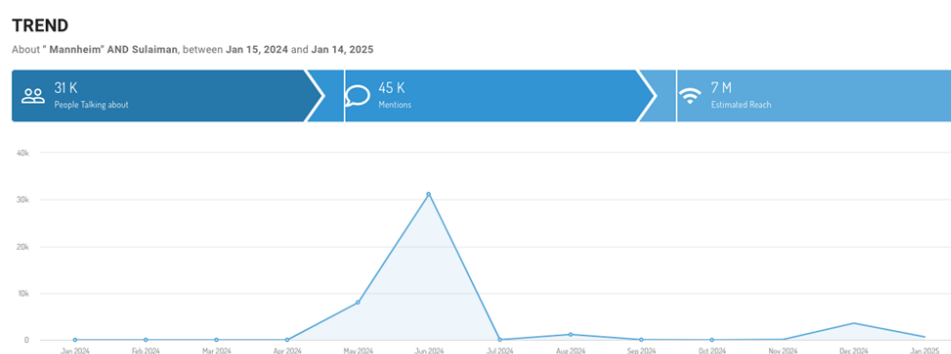

Fig. 1. Trend

The word cloud analysis (Fig. 2) of the terms most frequently associated with the keywords, provides deeper insight into online discourse. Key terms such as "Afghan migrant", "Stürzenberger anti-Islam", and "Islamist knifeman" dominated the discussions, which were primarily generated by German users, as indicated by the city-based engagement distribution chart (Table 1*)*.

This pattern suggests that, in such cases, after the initial "solidarity like" reaction, the users. who continued engaging in discussions were predominantly those directly impacted by or socially connected to the event.

Fig. 2. Key Concepts

Tabel 1. The City-Based Engagement Distribution Chart

City
Berlin
London
Hamburg
Stuttgart
Paris
Amsterdam
Vienna
Düsseldorf
Mannheim
Cardiff
Pekan
Brussels
Sydney
Melbourne
Frankfurt am Main

Sentiment analysis of key terms and morphological variants suggests a strong solidarity response toward the victims, and ideological and religious opposition toward the Afghan-born attacker. In total, 31,000 high-quality users actively contributed to the online narrative, generating an estimated seven million views across various platforms. Finally, another key element for long-term reflection and comparison is the gender distribution of users who engaged in discussions about the event. In the case of "Mannheim AND Sulaiman", there was a clear predominance of male users, accounting for 72% of total interactions (Fig. 3).

GENDER

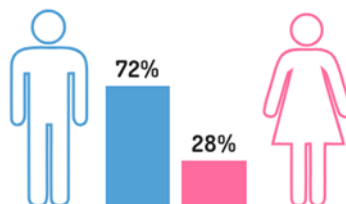About " Mannheim" AND Sulaiman, between **Jan 15, 2024** and **Jan 14, 2025**

Fig. 3. Gender

The Solingen Attack: Social Media Reactions and Hashtag Trends

On August 23, 2024, three people were killed and nine others injured during a city festival in Solingen. The attacker indiscriminately stabbed passersby before fleeing the scene. The attack occurred during the 650th anniversary celebrations of the city, amplifying its emotional and symbolic impact on the public.

Temporal Dynamics of Online Discourse, the timeline of keyword mentions for "Solingen AND Issa" (*Fig. 4*) reveals a single, sharp peak in online discussions, which rapidly declined within days of the attack. Unlike the Mannheim attack, which continued to resurface in online discourse following later incidents, the Solingen attack did not generate significant reactivation in response to the Magdeburg Christmas market attack. This suggests a different perceived threat perception among users.

Approximately 21,000 users contributed to online discussions surrounding the Solingen attack, 10,000 fewer than in the Mannheim case, while still generating an estimated eight million views across platforms.

TREND

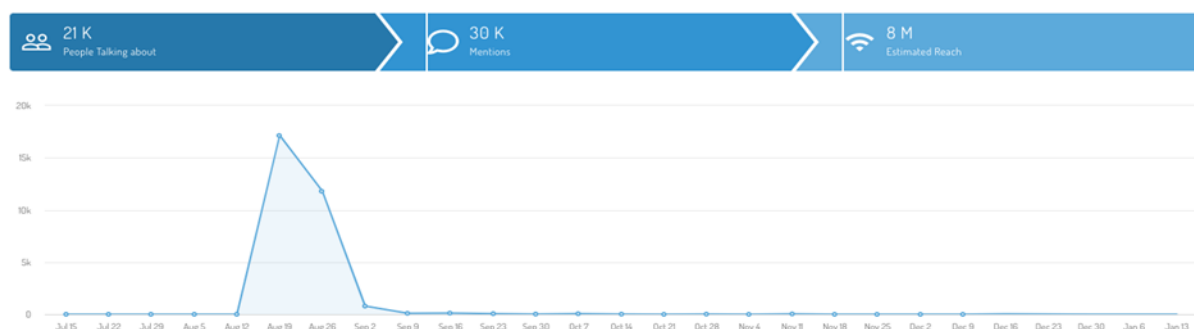About " **Solingen**" AND Issa, between **Jul 15, 2024** and **Jan 14, 2025**

Fig. 4. Keyword Mentions Trend

Since this was the second terrorist attack on German soil within the same year, additional insights into the emotional response of users can be drawn from the hashtag analysis (Table 2): possibly a more accurate indicator the public's sentiment and evolving discourse: a deeper perspective on how reactions shifted following the previous attack in Mannheim. Terrorist attacks have a measurable impact on public debates, often distorting political attitudes and shaping discussions on security and immigration (Brug & Spanje, 2023). This is reflected in the keyword and hashtag analysis of the Solingen attack, where terms related to immigration

policy (#stopasiel, #stopislam) dominated online discussions, reinforcing the idea that terrorism discourse is deeply intertwined with broader ideological conflicts.

Tabel 2. The Keyword and Hashtag Analysis

Hashtag	Mentions
#solingen	466
#terror	375
#Hashtag	367
#solingen	367
#terror	194
#stopasiel	194
#stopislam	194
#germany	34
#syria	16
#isis	8
#issa	8
#afd	7

Tabel 3. Comparing of Mannheim Attack and Solingen Attack

Mannheim Attack	Solingen Attack
Berlin	Berlin
London	Amsterdam
Hamburg	Hamburg
Stuttgart	Vienna
Paris	Bielefeld
Amsterdam	Rotterdam
Vienna	Bonn
Düsseldorf	London
Mannheim	Köln
Cardiff	Siegen
Pekan	Frankfurt am Main
Brussels	Munich
Sydney	Mainz
Melbourne	Rome
Frankfurt am Main	Washington, D.C.

By comparing geographical distribution of user engagement, it is possible to construct a geo-emotional map of conversations, which varies depending on the specific event. Despite discussions also extended beyond Europe, as evidenced by global participation in online conversations, the data reveal that German cities consistently accounted for the majority of the discourse (Table 3). Finally, the gender engagement distribution remained largely unchanged from Mannheim to Solingen, indicating a consistent pattern in user participation across both incidents (Fig. 5).

GENDER
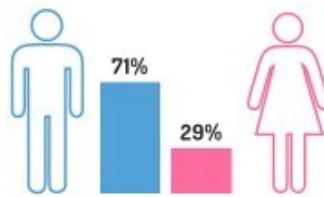About " Solingen" AND Issa, between Jul 15, 2024 and Jan 14, 2025

71%

29%

Fig. 5. Gender Solingen

The Magdeburg Attack: Social Media Engagement and Platform Shifts

On December 20, 2024, a car plowed into a crowd in downtown Magdeburg, a city in the state of Saxony-Anhalt. The attack resulted in two fatalities and approximately 70 injuries. The perpetrator, the 50-year-old Saudi-born doctor and anti-Islam activist Taleb Al-Abdulmohsen, was arrested at the scene. He had resided in Germany since 2006 and was reported to have acted alone as a lone wolf attacker.

Among the three attacks analyzed, the Magdeburg attack recorded the lowest volume of online mentions, totaling 8,000 citations. However, this lower quantity was counterbalanced by the high engagement quality of the 5,000 active contributors. Despite fewer mentions, the estimated reach remained consistent at 8 million views, comparable to the Mannheim and Solingen incidents (Fig. 6).

TREND
About "Magdeburgo" AND Abdulmohsen, between Jul 15, 2024 and Jan 14, 2025

5 K
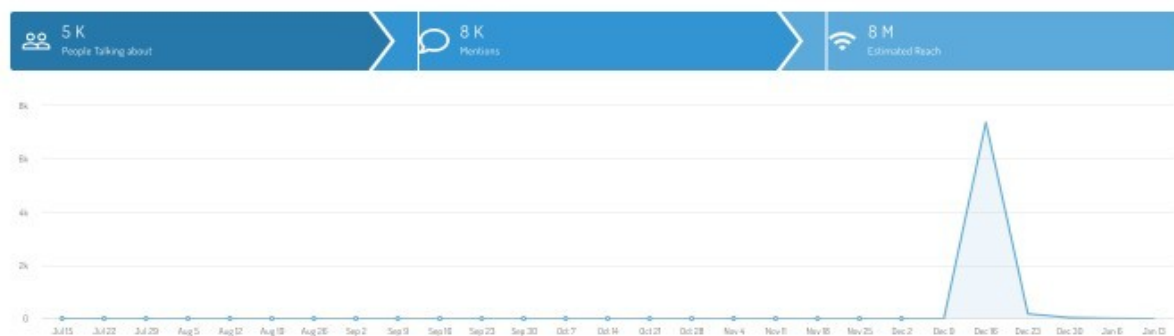People Talking about

8 K
Mentions

8 M
Estimated Reach

Fig. 6. Mannheim and Solingen incidents

A notable shift in audience demographics emerged in the case of the Magdeburg attack. Unlike the previous incidents in Mannheim and Solingen, where male users dominated online discussions, the proportion of female engagement increased significantly (Fig. 7).

An additional insight from the monitoring data concerns the platform distribution of high-engagement content. While the previous events mainly generated high engagement rates on X (formerly Twitter), the leading platform for engagement surrounding the Magdeburg attack was Instagram. The dissemination of crisis-related content on social media follows distinct diffusion patterns, influenced by platform-specific affordances (Schmidt & von Sikorski, 2017). Twitter (X), with its text-based, real-time nature, facilitates instant reactions and discursive interactions, making it the primary platform for immediate engagement in the

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Mannheim and Solingen attacks. In contrast, the highly visual format of Instagram fosters a more commemorative and emotionally resonant discourse, particularly during symbolic moments such as the Christmas season. This explains why the Magdeburg attack, occurring in a period of collective remembrance, saw a shift in engagement toward Instagram, where images and visual storytelling played a central role in shaping public reaction.
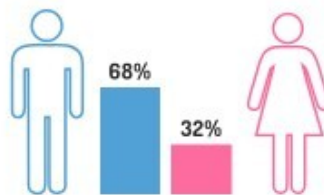

Fig. 7. female engagement increased significantly

Fig. 8 presents a comparative diagram of the sentiment analysis conducted across the three different datasets each collected in conjunction with the respective events and their associated keyword pairs.
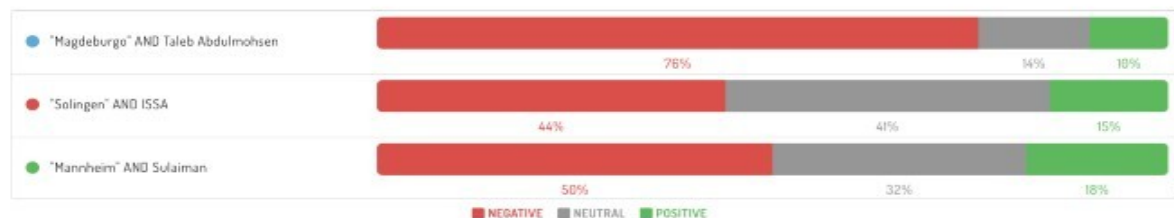

Fig. 8. Comparative diagram

CONCLUSION

Additionally, the study demonstrates how platform-specific affordances shape the nature of online discourse. As Schmidt and von Sikorski (2017) highlight, real-time platforms like X (Twitter) facilitate immediate discussion and rapid information diffusion, which was predominant in the Mannheim and Solingen attacks. In contrast, the Magdeburg attack exhibited a shift toward Instagram, where visual content fostered a more commemorative and emotionally driven form of engagement, particularly given its occurrence during the Christmas season. This reinforces previous research indicating that Instagram is often used for memorialization and digital mourning, whereas X remains central for breaking news and real-time commentary. From a broader perspective, the sentiment and hashtag analysis further support Van der Brug & van Spanje (2023) findings on how terrorist attacks shape public debates and influence political discourse on immigration and security policies. The prevalence of hashtags such as #stopasiel and #stopislam in discussions surrounding the Solingen attack

underscores the intersection between terrorism-related narratives and ideological conflicts, a phenomenon amplified by social media dynamics.

These findings have important implications for media studies, crisis communication, and terrorism research. First, they underscore the need for responsible media reporting to avoid the exacerbation of fear-driven narratives and the stigmatization of minority communities. Policymakers and digital platform regulators must consider how algorithmic amplification affects the visibility and persistence of terrorism-related discussions. Future research should explore the role of AI-driven content moderation in shaping public discourse on terrorism, as well as the long-term impact of digital commemoration practices on collective memory. Furthermore, integrating qualitative analysis of user-generated content would provide deeper insights into the emotional and ideological dimensions of these online discussions. As terrorism continues to evolve in the digital age, understanding how social media platforms mediate public responses remains critical for developing effective counter-narratives and fostering a more informed public debate.

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