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Securitized migration news and hostile audience reactions on Instagram: a computational analysis of Italian news posts and user comments

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Abstract

Migration has become one of the most contested issues in contemporary European public debate, where news coverage often frames migrants through the language of border control, legality, and public order. Such securitized representations may contribute to keeping migrants at a symbolic distance from audiences, presenting them less as socially embedded individuals and more as categories to be regulated or governed. While previous research has examined media representations of migration and online hate speech separately, less is known about how migration-related news content is associated with the hostile reactions that can emerge among social media audiences exposed to this content.

This study addresses this gap by analyzing migration-related Instagram posts published by eight major Italian news organizations between January 2025 and March 2026, together with the comments they generated. A corpus of 368 news posts and 76,998 user comments was analyzed by combining topic modeling of news posts with automated emotion detection and hate speech classification of user comments to examine how securitized thematic environments are associated with hostile audience responses. The results show that audience reactions were marked by a strong prevalence of negative emotions, with anger emerging as the dominant response across the corpus. This affective profile became more polarized in relation to news posts that framed migration through legal-institutional conflict, return procedures, border enforcement, and NGO-related controversies. In these securitized contexts, audience responses were more strongly concentrated around anger and disgust, and this emotional concentration was accompanied by higher levels of hate speech.

KEYWORDS: Migration, Hate Speech, Securitization, Media Framing, Instagram, Emotion Detection, Topic Modelling, Computational Social Science.

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1. Introduction

1.1 Migration, Media, and Online Hate Speech

Migration has become one of the most socially contested issues in contemporary European public debate. Southern Europe, and Italy in particular, represents a particularly relevant case in this regard due to its strategic position within migration routes from the Balkans and North Africa (Ceccorulli, 2020). Given the strong humanitarian and social implications of these phenomena, migration has long occupied a prominent place in public discourse, and it has rapidly become an institutional issue, a ground of political contestation, and an identity-laden component, shifting from a matter of emergency and humanitarian concern toward questions of security, social order, and legality.

Media discourse actively contributes to shaping public perceptions of migration and migrants, functioning as a vehicle for multiple, often contrasting, interpretations of social reality, problem definitions, causal interpretations, moral evaluations, and possible remedies (Entman, 1993). Previous research has

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highlighted the persistence of polarized and often distorted representations of migration in both traditional and digital media. A recent study by de Rosa and colleagues (2023) on the Italian online press has shown that migration-related discourse is structured through recurring representational patterns and politically salient symbolic oppositions, rather than through neutral descriptive reporting. Similarly, studies of Italian immigration discourse have shown that, even when not overtly hostile, implicit forms of misrepresentation are systematically observable in media communication (Coschignano et al., 2023). A substantial body of research has shown that migration is frequently framed according to a securitization perspective, that is, as a matter of control, surveillance, and public order. Migration has been described as a domain increasingly constructed through the language of threat, borders, institutional unease, and risk management (Bigo, 2002; Huysmans, 2000), which may further promote the polarization of public opinion.

Within this broader communicative context, the emergence of hostile audience reactions should not be understood as an isolated phenomenon, but as potentially linked to the discursive environments and media representations through which migration is framed and debated. Indeed, Conzo and colleagues (2021) showed that negative portrayals of immigrants can produce severe consequences, including greater perceptions of threat and anxiety, as well as physiological reactions related to aggression, suggesting that anti-immigration media discourse can potentially reinforce polarization and discrimination. Consistently, the role of media in framing public perceptions of immigration and migrants is especially important when studying the growing phenomena of hostility and hate speech, which have become central concerns in the study of contemporary digital discourse (e.g., Amnesty International Italia, 2024). Specifically, social media platforms have become key arenas for the circulation, reinterpretation, and contestation of migration-related content, especially when news posts trigger immediate and emotionally charged audience reactions or function as authoritative sources legitimizing distorted interpretations of reality.

In social media settings, news content and user commentary interact within the same communicative space, making visible not only media representations of migration but also the forms of public response they may trigger, intensify, or normalize. For this reason, social media platforms such as Twitter/X and Facebook have long been considered primary arenas for investigating online hate speech and discourse polarization. However, despite the growing relevance of social media platforms for digital news circulation, Instagram has remained comparatively understudied as an environment in which journalistic content and audience reactions coexist. This omission is particularly relevant in the Italian context, where Instagram reached 27.8 million users in early 2025, corresponding to 46.8% of the total population and 54.8% of adults aged 18 and above (DataReportal, 2025). Moreover, Instagram is progressively becoming an additional outlet through which newspapers and journalists disseminate news content, engage audiences, and extend the visibility of journalistic narratives beyond traditional media channels (Newman et al., 2025), while younger audiences increasingly rely on social platforms for news (Robertson et al., 2026). Instagram therefore represents a strategically relevant communicative environment in which journalistic narratives and audience reactions coexist within the same platform architecture. Building on this premise, the present study examines the communicative dynamics and representational frameworks under which hostile discourse is more likely to emerge. More specifically, it investigates how migration framings in Instagram posts published by major Italian news organizations are associated with audience emotional responses and hate speech.

1.2 Research on Hate Speech in Media Communication

Although the literature on migration-related hate speech is extensive, important aspects remain underexplored. A substantial portion of research on hate speech has concentrated on detection, annotation, corpus construction, and automated classification. This work has been crucial in documenting the presence of hostile discourse and in developing computational tools for its identification, especially in non-English contexts such as Italy. However, while this line of research has produced important resources, such as annotated corpora identifying hate speech and racial stereotypes in Italian Twitter discourse (Bosco et al., 2023; Sanguinetti et al., 2018), it has more often focused on how hate speech can be detected than on the communicative and representational conditions under which hostility is more likely to emerge.

Recent work has examined migration-related discourse on social media platforms in Italy primarily through Twitter/X, focusing on lexical associations, sentiments, and emotions over time (Ambrosetti & Miccoli, 2025). Instagram has also been studied in relation to immigration, but mainly as a space of polarized visual and symbolic representations rather than as an arena in which audiences react to news content through comments (de Rosa et al., 2020). However, aside from a few examples using social media such as Facebook (e.g., Humprecht et al., 2020), research on media framing and research on online hate have often remained analytically separated. On the one hand, studies of migration framing have examined how migrants are represented in political and media discourse. On the other hand, studies of online hostility have investigated the prevalence, linguistic structure, and classification of hate speech in user-generated content. Much less attention has been devoted to the relationship between these two dimensions. As a result, we still know relatively little about how migration is framed by Italian news organizations on Instagram, and how these framings

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may be associated with emotional responses and hostile discourse among users. This aspect is particularly relevant because it concerns not only the presence of hate speech, but also the broader social conditions of its activation. If migration is framed primarily through border enforcement, legal controversy, or institutional control, such representations may contribute to constructing migrants as distant, abstract, and governable others, rather than as socially embedded individuals.

This scenario is further complicated by the preexisting ideological posture of news organizations operating in the digital space. In the Italian context, which is characterized by a high degree of polarized pluralism (Mancini, 2013), media outlets such as "la Repubblica" and "La Stampa" typically maintain a progressive editorial orientation, whereas others, such as "Il Messaggero" and "Il Resto del Carlino", are characterized by more conservative stances; meanwhile, outlets like "Il Fatto Quotidiano" are more often associated with a populist, anti-establishment positioning. This ideological diversity reflects a range of representational logics that are transposed into the social media arena, potentially influencing how news posts trigger emotionally charged audience reactions. Understanding whether and how these different framings are associated with distinct emotional and hostile responses is therefore crucial for clarifying the communicative processes through which hate speech in public debate on immigration may be intensified or normalized.

1.3 Media Framing and Securitization of Migration

The gaps outlined above point to the need for an approach able to link media framings of migration to audience responses in online environments. Framing does not merely refer to the thematic content of news coverage, but to the interpretive organization of events through the selection and salience of specific aspects of reality, which in turn shape problem definitions, moral evaluations, and perceived courses of action (Entman, 1993). In the case of migration, this is especially relevant because public communication rarely presents migration as a neutral social phenomenon. Instead, it tends to organize it through recurring interpretive logics that foreground specific actors, threats, responsibilities, and solutions (Nese, 2023).

Research on immigration framing has shown that such frames can affect public opinion in substantively different ways, and that these effects are not reducible to a simple positive-versus-negative distinction. Previous studies have found that immigration frames influence attitudes by activating distinct evaluative and emotional processes, suggesting that the way migration is narrated can shape not only judgments about policy but also broader orientations toward migrants as a social group (Lecheler et al., 2015; Bos et al., 2016). This suggests that audience reactions in comment sections may be associated not simply with whether migration is discussed, but with how it is framed.

Among the possible framings through which migration is publicly constructed, securitization is especially important for understanding why some representations may trigger more hostility than others. From this perspective, migration becomes politically meaningful through discursive processes that define it as a matter of threat, border protection, surveillance, and institutional management, rather than simply as a demographic or humanitarian issue (Huysmans, 2000). This shift is part of a broader "governmentality of unease," in which migrants are increasingly positioned as objects of regulation and risk management, and migration itself is narrated through the vocabularies of control, instability, and public order (Bigo, 2002). Moreover, even when not overtly hateful, a securitized framing of migration may still contribute to constructing migration as a problem to be managed and contained, thereby promoting suspicion, hostility, and social anxiety, and often normalizing restrictive interpretations of migration-related events. For the purposes of this study, this means that journalistic framings centered on securitization may be especially relevant because they can create discursive environments in which hostile responses become more intelligible, resonant, or socially acceptable.

1.4 Securitization, Social Distance and Social Conditions of Hostility

From a socio-psychological perspective, one of the key consequences of securitized framing is its capacity to maintain migrants at a symbolic and cognitive distance from the audience. When migration is narrated primarily through the registers of border enforcement, institutional management, and legal regulation, migrants are systematically positioned as abstract categories (e.g., objects of policy and control) rather than as concrete individuals (Fernández, 2013). This process of abstraction has implications that extend beyond media representation itself, shaping how audiences perceive migrants and respond to migration-related content.

Research on moral disengagement (Bandura, 2002) has shown that dehumanizing or abstracting representations of outgroups reduce the inhibitory mechanisms that normally constrain aggressive or hostile behavior. When individuals are represented as undifferentiated members of a threatening category rather than as persons, the moral constraints against expressing hostility toward them are weakened. Applied to media contexts, Esses et al. (2013) showed that presenting immigrants as sources of infectious diseases, bogus queues-jumpers, or terrorists can foster dehumanization processes toward them. This suggests that framings which strip migrants of individual and social attributes, meaning treating them as flows, threats, or governance problems, may lower the psychological cost of hostile expression in online environments (Stephan & Stephan, 2017). Additionally, related work on dehumanization similarly suggests that when outgroup members are denied fully

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human qualities, thus represented as legal categories, or sources of risk rather than as individuals, they are more likely perceived as legitimate targets of prejudice, moral exclusion, and discriminatory responses (Haslam, 2006; Leyens et al., 2000). Crucially, this dynamic does not require overt hostility in the news content itself. A post covering a court ruling on expulsion procedures, or the legal controversy surrounding a naval blockade, may present migration as a governance issue without deploying explicitly hostile language. Yet such framings consistently define migrants through their legal status and their relationship to institutional power, rather than through the social or emotional attributes that normally sustain recognition of shared humanity. When people are encountered primarily as members of a problematic category (rather than as individuals) the psychological distance that facilitates hostile expression tends to increase. Importantly, if such dynamics are present in traditional media outlets, they are also likely to extend to social media environments, where audiences similarly engage with migration as a news topic almost exclusively through group-level representations.

In sum, unlike interpersonal or community contexts in which people may have direct experience of individual migrants, digital news environments present migration as an abstract social phenomenon, populated by categories rather than people. Under these conditions, the emotional and evaluative tone established by the framing of the original post acquires particular weight, since it constitutes much of the available context within which audiences interpret and respond. When that framing is organized around threat, enforcement, and institutional conflict, the social media platform may become a space in which anger and hate are not only more likely to be expressed, but also more likely to be experienced as appropriate, reinforcing rather than challenging the hostile orientations that securitized discourse tends to activate. Framing, emotions, and hostility should therefore not be treated as distinct dimensions of online discourse on migration, but as interconnected elements of the same communicative process.

1.5 The Present Research

This study investigates how migration is framed by major Italian news organizations on Instagram and how these framings are associated with the emotional responses and hate speech expressions produced by the audience of this communication. These framings of migration spread through the digital platform are, in fact, not neutral in their communicative consequences (Entman, 1993), but they create discursive conditions that differentially shape how audiences perceive, evaluate, and react to migration-related content (Lecheler et al., 2015). Understanding these conditions is therefore an essential step toward clarifying the broader dynamics through which hate speech in digital public debate may be intensified, normalized, or potentially mitigated.

To explore these dynamics at scale and in naturalistic conditions, the present study adopts a computationally assisted analysis applied to a large corpus of Instagram news posts and their associated comment threads. In this approach, topic modeling is used as a first step to identify recurring semantic clusters in the corpus. These clusters are then interpreted as empirically derived migration frames through qualitative inspection of keywords and representative posts, with attention to the dominant problem definitions, actors, institutional logics, and migrant representations made salient within each cluster. In interpreting these frames, particular attention is paid to whether they instantiate securitizing logics.

The analysis moves across three interconnected dimensions. The first concerns the framing structure of journalistic content: identifying recurrent migration frames makes it possible to characterize the interpretive logics through which Italian news organizations make migration meaningful on Instagram, and to assess the extent to which these logics reflect securitizing tendencies. The second dimension concerns the emotional reactions expressed in comment sections: examining the affective profile associated with each frame allows the study to move beyond a simple hostile versus non-hostile distinction, capturing the emotional climates that different representations of migration may accompany. The third dimension concerns the distribution and severity of hate speech across frames: by linking hostile expressions in comments to the framing of the corresponding post, the study assesses whether securitized representations of migration are associated with more intense or more widespread hostile reactions among audiences.

These three dimensions jointly inform the following research questions (RQ):

RQ1. Which migration frames can be identified in Instagram posts published by major Italian news organizations?

RQ2. How do emotional responses in user comments vary across these migration frames?

RQ3. How is hate speech distributed across these migration frames?

RQ4. To what extent is emotional polarization associated with hate speech intensity across migration-related frames?

Through the proposed research questions, the present study moves beyond a purely descriptive account of online hostility in migration-related online discourse, contributing to ongoing debates on the securitization of migration and addressing the broader communicative conditions under which hate speech may be intensified, normalized, or potentially mitigated.

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2. Method

2.1. Data gathering and Sample Construction

The study examined publicly available Instagram posts and corresponding user comments concerning immigration in Italy, published by major national news organizations between January 1, 2025 and March 1, 2026.

To ensure that the sample reflected a broad segment of the Italian media ecosystem, the corpus included the six leading generalist newspapers by circulation with an active Instagram presence, namely Corriere della Sera, la Repubblica, La Stampa, Il Messaggero, Il Resto del Carlino, and Il Fatto Quotidiano. Two major national press agencies, ANSA and Adnkronos, were also included in order to capture a more institutionally oriented and agency-driven form of reporting. The final dataset comprised posts published by these eight accounts and all corresponding user comments retrieved for the selected posts.

Posts were identified through a keyword-based filtering procedure designed to capture content explicitly referring to immigration and immigrants in the Italian context. The Italian search terms included *immigrazione* ("immigration"), *immigrat** ("immigrant/s"), *migrant** ("migrant/s"), *extracomunitar** ("non-EU national/s"), *clandestin** *irregolar** ("clandestine/irregular"), and *stranier** *irregolar** ("irregular foreigner/s"), including their morphological variants. A total of 42,765 posts were initially screened. Of these, 565 posts matched the filtering criteria. The resulting corpus was subsequently filtered to remove all duplicated posts and posts referring to migration in non-Italian or cross-national contexts without direct relevance to the Italian case (N = 197), resulting in a final sample of 368 posts.

For each retained post, up to 500 user comments were collected and linked to the corresponding post identifier, allowing the integration of post-level and comment-level analyses. The resulting dataset therefore had a hierarchical structure in which comments were nested within posts. This structure made it possible to examine how the main topic of a post related to the emotional and hate speech rate of the comment thread associated with it. At the end of the data gathering procedure, a total of 76,998 comments were collected. The distribution of posts across sources is reported in Table 1.

Table 1 - Number of posts per source.

Source	n posts	% posts
La Stampa	75	20.4
La Repubblica	63	17.1
Ansa	53	14.4
Il Corriere della Sera	53	14.4
Il Messaggero	43	11.7
AdNkronos	42	11.4
Il Fatto Quotidiano	33	9
Il Resto del Carlino	6	1.6

Before analysis, the dataset underwent a pseudonymization procedure aimed at protecting user privacy and ensuring compliance with GDPR principles. With the exception of the eight institutional media accounts, all user identifiers were permanently replaced with unique random alphanumeric keys. Mentions, tags, and URLs contained in the comments were systematically removed. The master key linking original identifiers to the pseudonymized dataset was stored separately in a password-protected JSON file on an offline device accessible only to the research team. In accordance with the principle of data minimization, identifying information was retained only for the period strictly necessary to satisfy research and reproducibility requirements.

2.2. Data Analysis

The analytical strategy combined post-level computational text analysis with comment-level emotion and hate speech detection to examine how different representations of migration in journalistic content were associated with audience reactions in the comment sections. The analysis was conducted in three steps. First, topic modeling was applied to the textual content of the posts to identify recurring semantic clusters in migration-related news coverage. These clusters were then interpreted as empirically derived migration frames through qualitative interpretation of keywords, phrases, and representative posts in each topic. Second, the emotional content of user comments was analyzed using an automatic emotion detection model, allowing comments to be classified according to their predominant emotional tone. Third, hate speech detection was applied to comments to identify hostile, derogatory, or discriminatory expressions. Finally, comment-level outputs were aggregated at the post level and linked to the corresponding post frame, allowing emotional and hostile reactions to be compared across framing patterns.

2.2.1. Discovering Migration Framing via Topic Modeling

As a preliminary step for topic modeling, textual content of Instagram posts was preprocessed by using the *spaCy* Python library (Honnibal et al., 2020). Preprocessing included Unicode and whitespace normalization, removal of URLs and numerical tokens, and lemmatization performed by means of the *it_core_news_lg* language model from *spaCy*. Topics were extracted using BERTopic (Grootendorst, 2022), a transformer-based topic modeling framework that combines contextual embeddings with clustering procedures. Sentence embeddings were generated using the *paraphrase-multilingual-MiniLM-L12-v2* (Reimers & Gurevych, 2019) multilingual model. Dimensionality reduction was performed using UMAP (McInnes et al., 2018), followed by density-based clustering with HDBSCAN (Campello et al., 2013). Text representation was further refined using a *CountVectorizer* with Italian stopwords and n-grams up to trigrams.

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To ensure robustness, a grid search over multiple topic solutions was performed. Model selection was based on diagnostic indices including clustering quality (silhouette score), topic diversity, assignment confidence, and outlier rate. Among the best-performing solutions identified by the grid search, the model producing the largest number of clusters was selected. This choice was made to preserve a more fine-grained representation of the different interpretive patterns through which migration was covered in the corpus. The selected solution assigned 325 posts to seven non-outlier clusters, while 43 posts were classified as outliers.

Manual inspection showed that these posts did not form an additional coherent migration frame, but rather consisted of semantically heterogeneous items with weak membership in the identified clusters and mixed or peripheral references to migration. They included, for example, posts on citizenship referendums and voting procedures, highly event-specific local controversies, and items in which migration appeared as a secondary element within broader discussions of crime, social marginality, or political protest. Consistent with this heterogeneity, their average maximum topic probability was 0.186, compared with 0.750 among posts assigned to one of the seven clusters. They were therefore treated as unassigned documents and excluded from subsequent topic-level analyses.

Each non-outlier post was assigned to its most probable semantic cluster, along with an associated probability score. The interpretation of clusters was conducted inductively by inspecting top keywords, n-grams, and representative documents. Manual labels were assigned to capture the dominant interpretive logic through which migration was framed within each cluster.

2.2.2. Emotion Detection and Polarization Measurement

The emotional content of user comments was analyzed using *GordonAI* (Miracula, 2025), an automatic emotion detection model for Italian-language text. Prior to inference, comments were preprocessed using the same normalization pipeline adopted for posts. In addition, emojis were converted into textual descriptions using the *emoji* Python library, to preserve affective information embedded in symbolic expressions. Comments shorter than three characters after preprocessing were excluded from analysis. The model assigned to each comment a probability distribution across seven emotional categories corresponding to Ekman's (1992) basic emotions (joy, sadness, fear, anger, surprise, and disgust) plus a neutral category. For each comment, both the most probable emotion label and its associated intensity (maximum probability) were retained.

To enable post-level analysis, comment-level outputs were aggregated by computing the mean probability of each emotion across all comments associated with a given post. Based on these distributions, an index of emotional polarization was computed as the inverse of normalized entropy (Shannon, 1948; Bright, 2018) of the emotion probability distribution, such that higher values indicate a stronger concentration of responses around a limited set of emotions, and lower values indicate more evenly distributed emotional reactions. In other words, high polarization values refer to a post triggering a singular, dominant emotional response across the audience. Conversely, low polarization values indicate an emotional fragmentation, suggesting that the content elicited a heterogeneous range of reactions, reflecting either a lack of thematic focus or a deeply ambivalent reception among users.

2.2.3. Hate Speech Detection

Hate speech detection was performed using *IMSyPP*, a pretrained transformer-based model for Italian-language hate speech classification (Kralj Novak et al., 2022), on preprocessed comments.

The model assigned each comment to one of four categories: acceptable, inappropriate, offensive, and violent, thereby capturing different levels of severity within hostile discourse. In addition to categorical predictions, the model produces a full probability distribution over classes. For the purposes of this study, hate speech was operationalized in three complementary ways. First, a binary indicator was constructed by distinguishing acceptable from non-acceptable content. Second, a continuous hate score was computed as the complement of the probability assigned to the acceptable class, providing a graded measure of hostility. Third, the distribution of severity levels across categories was retained to capture qualitative differences in hate expression. At the post level, hate-related indicators were aggregated across comments, including the proportion of hateful comments (hate rate), average hate probability, and category-specific prevalence.

3. Results

3.1. Main Migration Frames in Instagram News Posts

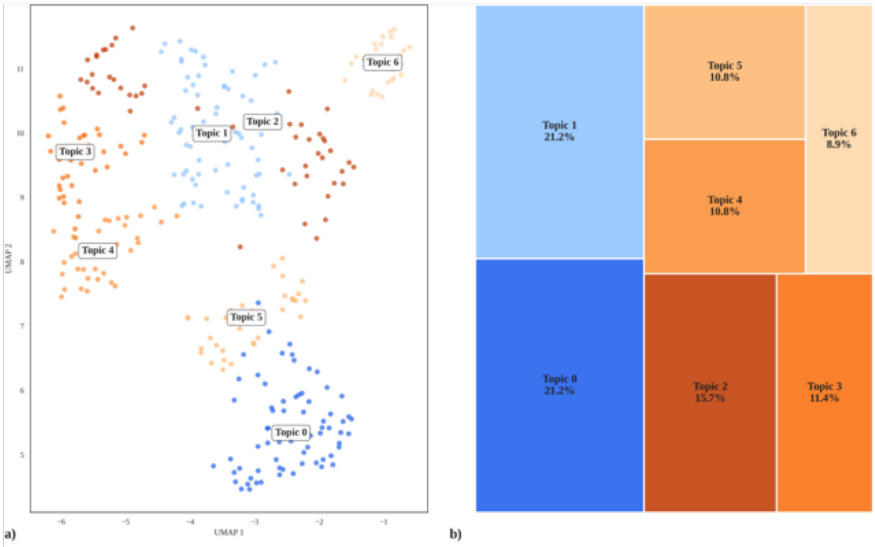
Topic modeling identified seven main clusters in the corpus of Instagram posts related to immigration. Figure 1 shows the semantic distribution of posts in the embedding space obtained with BERTopic, together with the relative prevalence of each topic, while Table 2 reports the main key terms and example documents used to interpret and label each cluster.

The two most frequent topics were Topic 0 and Topic 1, each accounting for 21.2% of the posts (Figure 1b). Topic 0 (*Humanitarian Rescue and Shipwrecks*) was characterized by terms referring to maritime routes, shipwrecks, and rescue operations (e.g., sea, coast guard, Mediterranean, boat, Libya). Topic 1 (*EU Governance and Migration Policy*) included terms related to elections, political actors, and European institutions

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Figure 1 - Topic structure of immigration-related Instagram posts identified with BERTopic.

Note. (a) Two-dimensional UMAP projection of document embeddings, showing the semantic distribution of posts across the seven topics. BERTopic assigned 325 posts to seven non-outlier topics; 43 posts were treated as outliers and excluded from topic-level comparisons. Each point corresponds to a post and is colored according to its assigned topic. (b) Topic prevalence, showing the proportion of posts assigned to each topic. Topic 0: *Humanitarian Rescue and Shipwrecks*; Topic 1: *EU Governance and Migration Policy*; Topic 2: *Demographic Change and Welfare Systems*; Topic 3: *Legal Disputes and Return Policies*; Topic 4: *Border Control and NGO Operations*; Topic 5: *Crime, Detention and Violence*; Topic 6: *Religious Ethics and Migrant Reception*.



(e.g., election, campaign, Europe, vote, Germany). Topic 2 (*Demographic Change and Welfare Systems*) represented 15.7% of the posts and included terms referring to population, poverty, welfare, and social conditions (e.g., population, poverty, culture, living conditions). Topic 3 (*Legal Disputes and Return Policies*) accounted for 11.4% of the posts and was characterized by references to courts, legal procedures, and international agreements (e.g., court, tribunal, protocol, Albania). Topic 4 and Topic 5 each represented 10.8% of the corpus. Topic 4 (*Border Control and NGO Operations*) included terms related to naval blockades, NGOs, and judicial decisions (e.g., naval blockade, magistrate, NGO, ship, sentence). Topic 5 (*Crime, Detention and Violence*) was associated with crime, detention, and violence (e.g., murder, victim, refugee, prison, crime). Finally, Topic 6 (*Religious Ethics and Migrant Reception*) was the least frequent (8.9%) and included terms referring to religion, the Catholic Church, and moral discourse (e.g., pope, church, dignity, Vatican). The UMAP projection of document embeddings suggests partial semantic overlap in the language used in some topics (Figure 1a). In particular, Topics 0 (*Humanitarian Rescue and Shipwrecks*) and 5 (*Crime, Detention and Violence*) appear relatively close to each other, as do Topics 3 (*Legal Disputes and Return Policies*) and 4 (*Border Control and NGO Operations*), while Topics 1 (*EU Governance and Migration Policy*) and 2 (*Demographic Change and Welfare Systems*) occupy neighboring areas in the central portion of the map. By contrast, Topic 6 (*Religious Ethics and Migrant Reception*) is positioned more separately from the other clusters, suggesting a more distinct semantic profile within the corpus.

3.2. Emotion Distribution Across Migration Frames

Emotion detection was applied to all comments associated with the posts in the dataset to observe the emotional reactions elicited by different thematic framings of immigration. Figure 2 shows the distribution of emotions for each topic, together with the overall emotional profile across the entire corpus.

Across all migration frames, anger was the most prominent emotion, with an average post-level probability of 39.0%. Joy was the second most frequent emotional component (15.7%), followed by disgust (11.9%), sadness (10.1%), and fear (9.2%), whereas surprise remained marginal overall (1.1%). Neutral reactions accounted for 13.1% of the overall emotional profile. Taken together, these results indicate that Instagram discussions about immigration were characterized by a clear prevalence of negative emotions, especially anger.

Although anger was the dominant emotion across all frames, its relative weight varied across thematic areas. Posts belonging to *Legal Disputes and Return Policies* (Topic 3) and *Border Control and NGO Operations* (Topic 4) showed the highest levels of anger among all frames, respectively 43.2% and 42.2%, together with the highest levels of disgust, 14.4% and 14.5%. *Crime, Detention and Violence* (Topic 5), *EU Governance and Migration Policy* (Topic 1), and *Humanitarian Rescue and Shipwrecks* (Topic 0) also displayed a strong prevalence of anger, respectively 40.1%, 40.0%, and 38.4%.

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Table 2 - Topics identified in migration-related Instagram posts.

Note. Key terms are English translations of the original Italian terms identified by the topic model. Example documents are English translations of excerpts from the original Italian post texts. Omissions in the example documents are indicated by square brackets. Translations are provided to improve accessibility for an international readership.

Topic	Documents	Prevalence	Key terms (translated)	Label	Example document (translated)
0	69	21.2%	shipwreck, vessel, boat, navy, sea, coastal, Libyan, Libya, Mediterranean, coast guard	*Humanitarian Rescue and Shipwrecks*	"The sea continues to swallow lives, and the Italian coasts are returning their remains. In the past week, the remains of 15 people have been found along Italian shores, victims of shipwrecks caused by the violent storms that struck the Mediterranean in January. These tragic events coincided with the third anniversary of the Cutro shipwreck, where 94 people died in 2023. […]"
1	69	21.2%	demonstration, European Union, electoral, election campaign, European, vote, Germany, German	*EU Governance and Migration Policy*	"The new party founded by former Folgore commander and later League deputy secretary Roberto Vannacci is called Futuro Nazionale con Roberto Vannacci (FNV). According to Article 1 of its statute, the party aims to promote popular participation in Italian political life, supporting ideas and proposals intended to guarantee the country's internal and external security, the defence of borders, the natural family, and life. [...]"
2	5	15.7%	population, poverty, arrival in Italy, Spain, culture, living, social, Sanremo, million	*Demographic Change and Welfare Systems*	"At a time when much of Europe is tightening its migration policies, Spain has introduced an unprecedented measure: a decree to regularize around 500,000 people living in irregular conditions. Defined by the socialist government as a 'historic' move to remove past bureaucratic barriers, the initiative aims to integrate thousands of residents into the country's legal framework […]"
3	37	11.4%	European Court of Justice, Court of Rome, Italy-Albania protocol, court, Gjader, Albania	*Legal Disputes and Return Policies*	"The European management of migration flows has returned to the centre of international debate, highlighting the need to guarantee rights and transparency. The Court of Justice of the European Union has called on Italy to respect legal safeguards for migrants. […]"
4	35	10.8%	naval blockade, court, ship disembarkation, magistrate, Diciotti ship, defendant, naval, conviction	*Border Control and NGO Operations*	"The Court of Palermo has ruled that the NGO Sea-Watch must be compensated with 76,000 euros for the unjustified detention suffered by the Sea-Watch 3 in 2019 after the Rackete case. The NGO itself announced the decision. 'While the Meloni government announces a "naval blockade" and attacks NGOs involved in rescue operations at sea […]"
5	35	10.8%	murder, Libya, Libyan, kill, victim, refugee, torture, perpetrator, report, crime	*Crime, Detention and Violence*	"Maysoon Majidi, the 29-year-old Kurdish activist who had been arrested on 31 December 2023 on charges of aiding irregular immigration, was acquitted because she 'did not commit the act.' The acquittal was issued by the Court of Crotone.[…]"
6	29	8.9%	Pope Francis, Catholic, bishop, church, Roman, Santa Maria, square, Pope Leo XIV, dignity	*Religious Ethics and Migrant Reception*	"No more weapons, dignity for migrants and marginalized people, and investment in the family 'founded on the stable union between a man and a woman': this was the warning issued by Pope Leo XIV during his meeting in the Vatican with the diplomatic corps accredited to the Holy See. [...]"

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Notably, *Humanitarian Rescue and Shipwrecks* displayed the highest level of sadness across all frames, 15.8%, suggesting a more grief-oriented emotional profile compared with the more explicitly securitized frames. A different pattern emerged for *Demographic Change and Welfare Systems* (Topic 2), where anger remained high, 36.6%, but was accompanied by comparatively higher levels of joy, 19.5%, and neutral reactions, 14.6%. Finally, *Religious Ethics and Migrant Reception* (Topic 6) showed the lowest level of anger, 31.6%, and a more balanced emotional profile, with relatively higher proportions of joy, 19.6%, neutral reactions, 16.9%, fear, 10.9%, and sadness, 10.7%.

3.3. Hate Speech Across Migration Frames

Hate speech detection was applied to all comments and then aggregated at the post level to estimate the prevalence and severity of hostile language associated with each topic. Figure 3 shows the mean post-level hate rate across topics together with severity-specific hate speech rates. Across the dataset, the majority of comments were classified as non-hate, but the average post-level prevalence of hate speech varied substantially across topics. The highest mean hate rates (Figure 3b) were observed for *Legal Disputes and Return Policies* (Topic 3; 23.2%), *EU Governance and Migration Policy* (Topic 1; 22.4%), and *Border Control and NGO Operations* (Topic 4; 22.0%). Lower values were observed for *Crime, Detention and Violence* (Topic 5; 16.2%), *Humanitarian Rescue and Shipwrecks* (Topic 0; 13.9%), and *Religious Ethics and Migrant Reception* (Topic 6; 13.9%), while the lowest mean hate rate was found for *Demographic Change and Welfare Systems* (Topic 2; 12.1%).

When considering severity levels, most hate-related comments were classified as offensive rather than violent or inappropriate. Across all topics, the offensive category accounted for the largest share of hate speech, ranging from approximately 78.8% to 91.3% of hateful comments depending on the topic (e.g., direct derogatory expressions such as “Go f*** yourself, you piece of s***” [Comment 73,589]; translated from Italian). Violent expressions were relatively rare but appeared more frequently in *Crime, Detention and Violence* (Topic 5; 4.7%) and *Humanitarian Rescue and Shipwrecks* (Topic 0; 4.3%) (e.g., explicit threats such as “You are disgusting pieces of s***, I would kick you back to your filthy country” [Comment 40,398]; translated from Italian), whereas inappropriate language was more common in *Demographic Change and Welfare Systems* (Topic 2; 19.7%) and *Humanitarian Rescue and Shipwrecks* (Topic 0; 15.2%) compared to the other topics (e.g., stigmatizing expressions such as “Typical woke generation nonsense” [Comment 2,936]; translated from Italian) (Figure 3a).

3.4. Hate speech and Emotional Polarization

To provide an integrated representation of the relationship between emotional reactions and hostile language intensity, we used the continuous hate score described above and computed, for each topic, the average hate score, the level of emotional polarization in the comments, and the number of posts assigned to the topic. These indicators are jointly displayed in Figure 4.

Topics related to migration policies (Topic 1), border control (Topic 4), and legal disputes (Topic 3) were associated with the highest levels of hate. The latter two (*Border Control and NGO Operations* and *Legal Disputes and Return Policies*) also showed high emotional polarization.

Humanitarian Rescue and Shipwrecks (Topic 0) and *Demographic Change and Welfare Systems* (Topic 2) were characterized by lower average hate scores, despite moderate levels of polarization. *Crime, Detention and Violence* (Topic 5) appeared close to the median values for both dimensions, indicating an intermediate profile. *Religious Ethics and Migrant Reception* (Topic 6) showed the lowest values of both polarization and hate score. Taken together, these results indicate that frames centered on political decision-making, border management, and legal conflict are associated with stronger emotional polarization and higher levels of hate speech, whereas humanitarian and moral-religious frames are linked to less hostile audience responses.

4. Discussion

The findings of this study offer a systematic picture of how migration is framed on Instagram by major Italian news organizations, and of the emotional and hostile dynamics these framings tend to activate in their audience.

The topic modeling results identified seven distinct thematic clusters, capturing the range of interpretive logics through which major Italian outlets framed migration on Instagram during the observation period, from January 2025 to March 2026. The two most prevalent topics, *Humanitarian Rescue and Shipwrecks* and *EU Governance and Migration Policy*, together accounting for over 40% of the corpus, reflect the main aspects around which Italian migration discourse has long been organized: the immediate human emergency at sea and the broader political-institutional contestation over how Europe and Italy should respond to it (Radicioni et al., 2021). The remaining topics cover a spectrum from demographic and welfare concerns to judicial and enforcement controversies, religious and ethical debates, and crime-related narratives. Notably absent from this structure is any topic centered on migrants' experiences, integration trajectories, or social lives in the receiving country, a silence that is itself theoretically meaningful and consistent with prior findings on the systematic underrepresentation of migrant voices and perspectives in mainstream European journalism (Berry et al., 2016; Georgiou et al., 2017; Greussing & Boomgaarden, 2017).

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Figure 2 - Post-level emotion profiles across topics.

Note. Values are mean post-level emotion probabilities (%). Neutral emotion category excluded for visualization purposes.

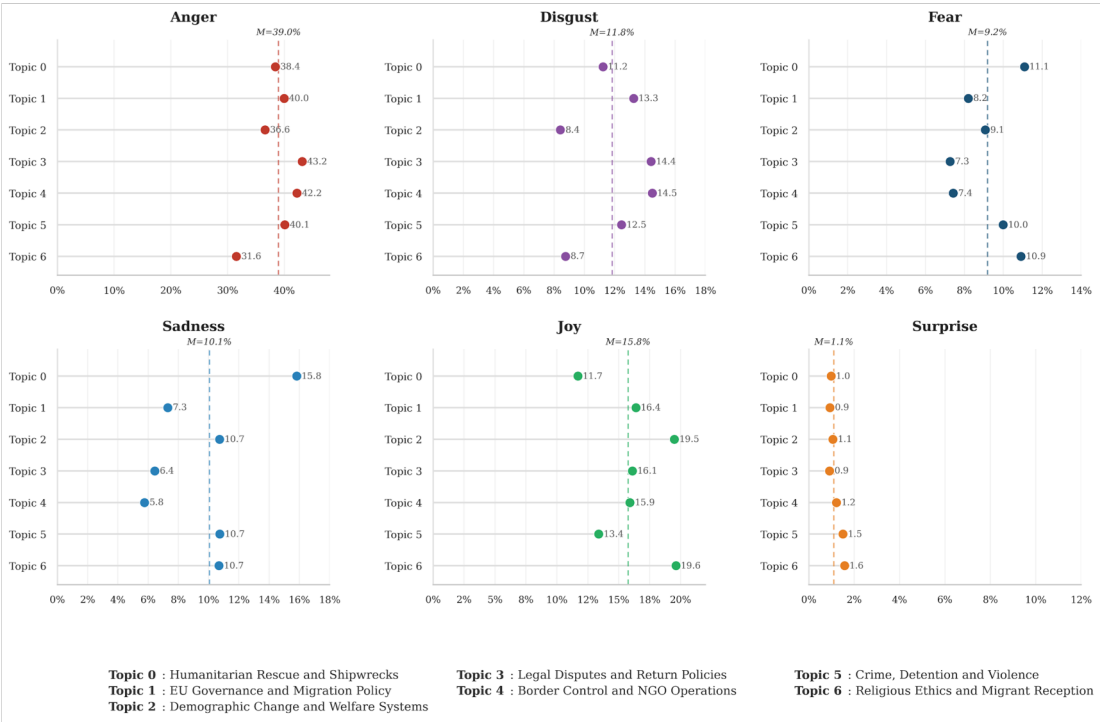
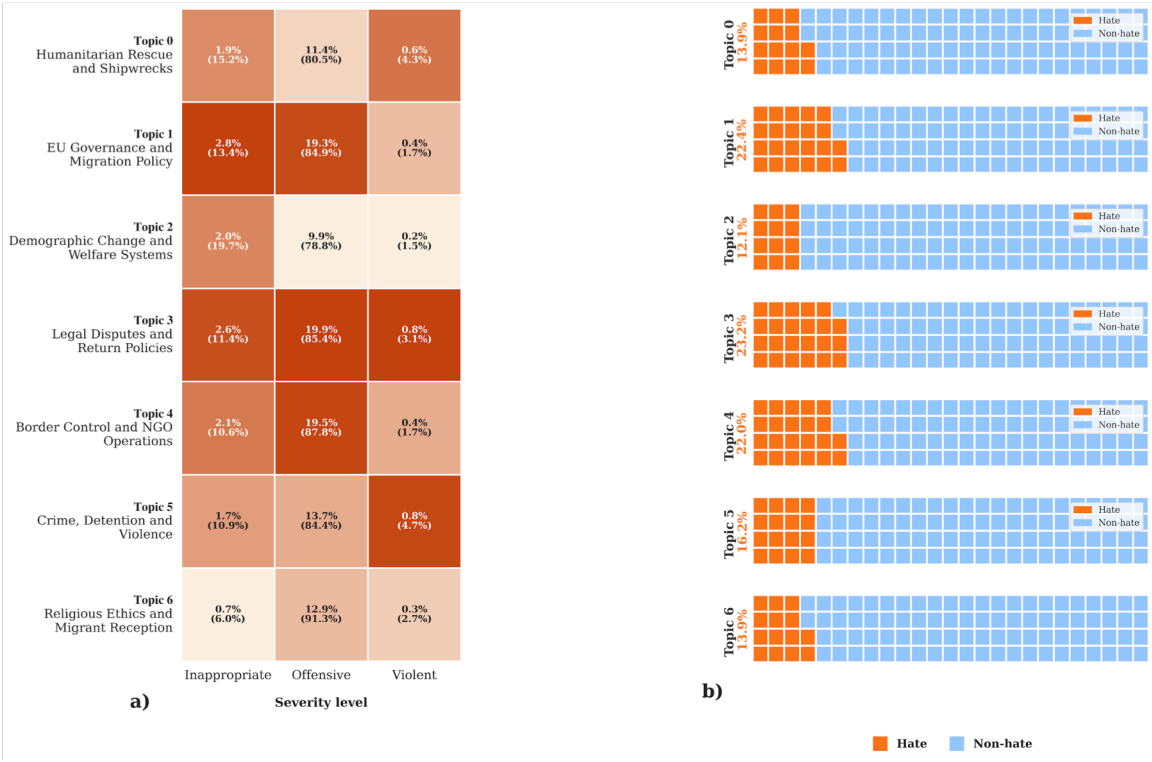


Figure 3 - Hate speech prevalence and severity across topics.

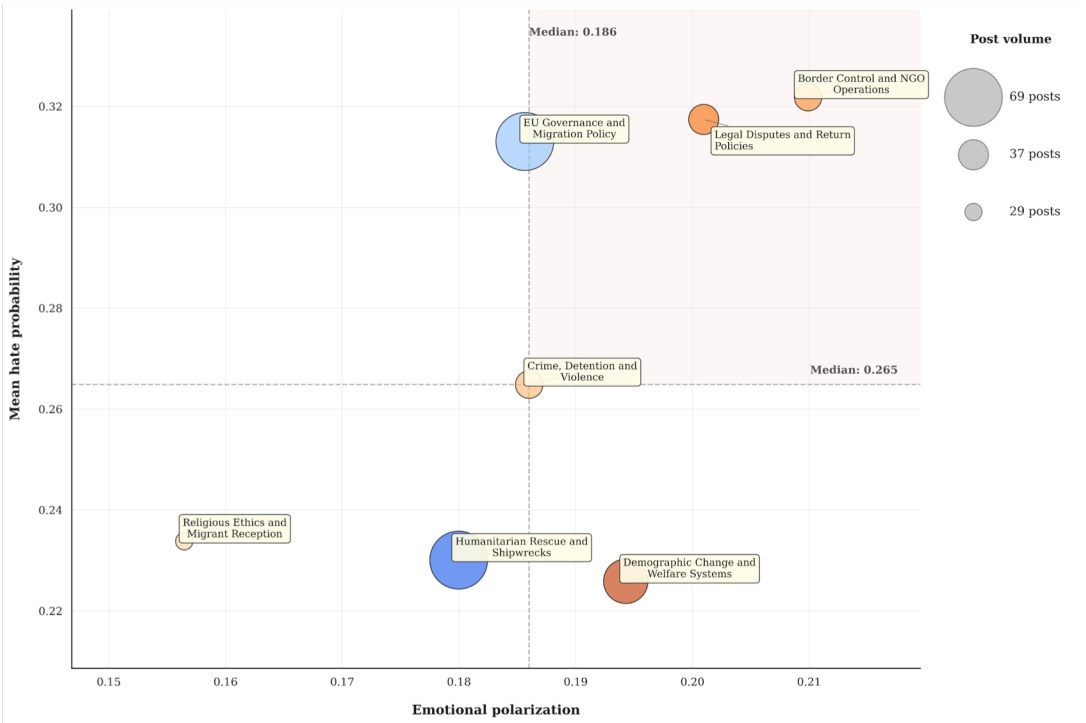
Note. Panel (a) shows mean post-level severity-specific hate rates. Main values report the mean percentage of all comments classified in each severity category; values in parentheses report the mean percentage of each category among hateful comments. Panel (b) shows the mean post-level binary hate rate. Values are averaged across posts.



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Figure 4 - Emotional polarization and mean hate probability across topics.

Note. Each bubble represents a topic. The x-axis shows mean emotional polarization, and the y-axis shows the mean continuous hate score, computed as one minus the probability assigned to the acceptable class. Bubble size represents the number of posts assigned to each topic. Dashed lines indicate median values across topics.



Our results showed that, regardless of the specific angle through which migration is framed, audience reactions are predominantly negative. Across all topics, anger was the dominant emotion registered in comment sections, a finding consistent with prior research showing that migration-related news systematically activates negative affective responses among audiences (Conzo et al., 2021; Lecheler et al., 2015). Yet the distribution of anger was not uniform. Comments associated with *Legal Disputes and Return Policies* and *Border Control and NGO Operations* display the highest concentrations of anger and disgust among all topics. This pattern is particularly relevant in light of previous findings on the affective structure of intergroup hostility. While anger tends to orient individuals toward confrontational action, disgust is more closely associated with moral exclusion and the denial of social membership to outgroup members (Cottrell & Neuberg, 2005). Their joint prominence in these topics is thus consistent with the theoretical perspective suggesting that frames positioning migrants as objects of regulation and institutional management may activate the emotional repertoire most directly associated with outgroup derogation and the weakening of moral constraints against hostile expression (Bandura, 2002). This theoretical expectation is supported by recent work showing that moral disengagement mediates the relationship between perceived immigration threat and online incivility across European contexts marked by political polarization around immigration (Bührer et al., 2026).

The emotional concentration observed in these topics is further reflected in their emotional polarization scores, which rank among the highest in the corpus. High polarization, meaning the convergence of audience responses around one or two dominant emotions rather than a distributed affective profile, may further amplify the communicative dynamics activated by securitized framing. When comment sections are dominated by anger and disgust to the near exclusion of other emotional registers, such concentration tends to be associated with a higher likelihood of hostile expression going uncontested and normalized (Rossini, 2022). This is also consistent with evidence that topics related to political conflict and policy controversy systematically elicit more affectively concentrated audience reactions than other news categories (Salminen et al., 2020), and with broader findings indicating that emotionally uniform discursive environments may lower the threshold at which hostile expression is perceived as normal or acceptable.

These patterns find direct confirmation in the hate speech detection results. Topics with the highest emotional polarization, such as *Legal Disputes and Return Policies* and *Border Control and NGO Operations*, also show the highest proportions of hostile comments. Notably, this hostility does not necessarily translate into overt violence, as suggested by the severity

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profile of detected hate speech that skews toward offensive rather than violent expressions across all topics. However, prior research has shown that while the most prevalent forms of online hate fall below the threshold of explicit threat, they nonetheless promote degradation, stigmatization, and the normalization of exclusionary attitudes toward outgroup members (Waldron, 2012; Salminen et al., 2020). Similarly, research on the normalization of hostile discourse suggests that repeated exposure to offensive but sub-threshold content progressively lowers audience sensitivity to exclusionary language, making more extreme expressions more intelligible over time (Bührer et al., 2025).

Taken together, the three explored dimensions of thematic framing, emotional response, and hate speech converge on a coherent interpretive picture. Immigration and migrants discourse on Italian Instagram is not homogeneous. Narratives that represent migration as a problem of governance and legal conflict generate more emotionally concentrated and more hostile audience reactions than topics organized around humanitarian, demographic, or religious-ethical registers. This gradient is consistent with prior evidence that enforcement and security framings of migration tend to exacerbate negative and emotionally charged audience responses (Guo et al., 2025). The present study extends that evidence to a platform and national context that have received little systematic attention in the existing literature.

4.1. Intergroup Contact as a Counter-Hate Strategy

Although hate speech in online contexts is widespread, there are strategies that may potentially counteract it. Among these, intergroup contact represents one of the most effective strategies identified by social psychology research. Specifically, positive contact between members of different groups is typically associated with a reduction in prejudice (Pettigrew & Tropp, 2006) – also when considering harsh forms like dehumanization (Vezzali et al., 2022) – even in presence of threatening groups (Van Assche et al., 2023), and among most prejudiced individuals (Turner et al., 2020) Importantly, the effects of contact also extend to collective action, with positive contact often producing mobilizing effects, especially among advantaged group members (who hold the power), being associated with increased willingness to support disadvantaged groups (Cocco et al., 2024b).

Unfortunately, research on the association between intergroup contact and hate speech is still at an early stage. Arcila-Calderon et al. (2022) conducted a European study considering hate speech in relation to social acceptance of migrants and refugees. Results revealed that hate speech (derived from over 800,000 tweets) was lower in regions with higher opportunities of contact and support for social acceptance of migrants and refugees. Moreover, it was found that direct contact, when intimate and positive, can buffer the negative association between media news and attitudes (Fuochi et al., 2020). Taken together, these findings suggest that social interventions that promote positive intergroup contact could be a powerful tool to mitigate hate speech expressed in media news in online contexts. A further study by Soral et al. (2022) revealed that contact interventions fostered an affective response by increasing empathy, which in turn favored greater sensitivity to counteract hate speech and make less use of derogatory language toward refugees. It is worth noting that none of these studies tested contact with stigmatized categories online and its effects on hate speech. We argue for the importance of examining online contact as a possible antidote to hate speech in online contexts.

Finally, contact can also occur in online contexts, where communication between groups is mediated by technological devices, like smartphones, computers, tablets (Amichai-Hamburger & McKenna, 2006), and where several mediums are available (e.g., forums, chats, e-mail). Even when directly embedded in online contexts, contact can therefore represent a safe strategy to promote harmonious intergroup relations, as it may ensure greater anonymity, social equality because subtle cues revealing status differences are less visible, greater control of the interaction. In addition, online contact potentially allows a much higher number of intergroup contacts, by eliminating barriers of space. Research mainly conducted over the last ten years has indeed shown that positive contact between groups is an effective tool also in online environments (White et al., 2020, 2021). Relevant to the present aims, it has been shown that online contact can also favor the development of community ties, strengthening relationships among members of the same community (Cocco et al., 2024a) and therefore mitigate hate speech. A further relevant aspect of online contact is that, like face-to-face offline contact, its effects are allowed by affective changes, like a reduction in anxiety at the prospect of interacting with outgroup members (White et al., 2019). To the extent that, as our study shows, hate speech is emotionally connotated, a strategy based on online contact may allow the activation of affective processes that mitigate prejudice, possibly also when it is expressed as hostility and hate speech in online environments (Sportelli et al., 2025).

4.2. Limitations and Future Research

Several limitations of this study should be acknowledged alongside the strengths that qualify its contributions. The design is observational and cross-sectional. Consequently, the associations documented between thematic framing and audience reactions are descriptive. The co-occurrence of securitized topics with higher hate speech and emotional polarization does not establish that the former produces the latter, as unmeasured confounders such as societal contextual factors or pre-existing audience characteristics may account for part of the observed variation. This is, however, a common limitation shared by naturalistic

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studies of online discourse, and it is precisely the ecological validity of the chosen approach that constitutes one of its main strengths.

It should also be noted that the present study documents associations between framing and hostile reactions without directly investigating the mechanisms through which hate speech is promoted or, conversely, mitigated. Understanding what communicative, social, or contextual factors may mitigate the dynamics documented here remains an important open question.

In this regard, future research would benefit from incorporating broader contextual variables that may affect the production and diffusion of hate speech in migration-related online discourse. Particularly relevant are territorial and community-level factors, such as the presence of local integration initiatives, the density of intergroup contact opportunities, or the salience of pro-migrant civic mobilization in the areas where audiences are located. Their inclusion in future comparative or multilevel designs would contribute to a more contextually grounded understanding of how media framing effects on online hostility vary across different social environments.

A second limitation relies on the computational models employed for emotion detection and hate speech classification. These models have not been validated through manual annotation on this specific corpus. Both *GordonAI* and *IMSyPP* are purpose-built for Italian-language text, but their accuracy on social media cannot be assumed without empirical verification. Results should be interpreted considering this uncertainty and future work should incorporate inter-annotator reliability checks on a stratified sample of comments. It is worth noting, however, that the consistency of the patterns across the analytical dimensions of emotion and hate speech provides some convergent support for the robustness of the findings.

The study is also limited to textual content, leaving aside the visual elements that constitute a primary communicative mode on Instagram. Research on visual framing has shown that images exert independent effects on audience responses, and their integration into future computational analyses of Instagram content represents an important direction for multimodal work. Similarly, the sample is restricted to eight major news organizations, excluding explicitly partisan or far-right outlets that are known to produce more intensively securitized framing and to attract more hostile audiences. While this research design choice reflects a deliberate focus on mainstream journalism and the audience reactions it generates, the variation captured in the present corpus likely underestimates the full range of framing effects observable across the Italian media spectrum. Future research targeting such outlets would allow a more comprehensive test of the securitization hypothesis.

5. Concluding remarks

This study examined how major Italian news organizations frame migration on Instagram and how different framings shape the emotional and hostile dynamics they generate among audiences. Combining topic modeling, emotion detection, and hate speech classification on a hierarchically structured corpus of posts and comments, the findings reveal a systematic and theoretically interpretable pattern. When migration is narrated through a securitized framing, the audience reaction becomes more concentrated around anger and disgust, and substantially more hostile than when the same issue is framed in humanitarian, demographic, or moral-religious terms. These results extend prior evidence on securitization and audience response to a platform and national context that the existing literature has largely overlooked.

These findings, however, cannot be interpreted in isolation from the national context and its political trajectory during the period under study. The corpus was collected during a phase in which migration governance was subject to intense institutional and judicial contestation. The legal status of offshore detention facilities, the criteria for designating safe countries of origin, and the respective roles of executive and judicial powers in asylum and return procedures all became primary grounds of public and political conflict, with consequent prominent media coverage. It is perhaps unsurprising, then, that the topics generating the highest rates of hostile comments, concerning legal disputes and border control, map directly onto the discursive terrain in which this contestation unfolded. The findings thus suggest that the association between securitized framing and online hostility documented here reflects not only the general properties of enforcement-oriented migration discourse, but also the amplifying effect of a political conjuncture in which migration was simultaneously institutionally contested and persistently salient in the public agenda. This has consequences that extend beyond the present analysis. When human groups become the sustained object of political contestation and media conflict, the hostile reactions documented in this study serve as a reminder of the potential human costs of that process, for the people whose lives and legal status are at stake in the debates being commented upon.

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