

# The Dark Side of News Consumption: A Systematic Review on Private Messaging Networks Studies and Journalism

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*In recent years, there has been a growing trend of news sharing through private messaging apps. This shift presents significant challenges for journalism, particularly in terms of media trust and news dissemination. Despite the importance of studying the role of private messaging apps in shaping public opinion, there is a lack of systematic approaches. After a scientific literature review including terms such as “WhatsApp”, “Telegram”, and “mesospaces”, content and thematic analyses were carried out to identify research methods and topics. A total of 61 documents was retrieved in late 2022, 53 of which are articles in WoS journals. Results shed light on the most common practices, and while WhatsApp remains the most studied platform, paradoxically, it is still in the experimental stage. While the use of private messaging apps for news reception may be considered a private activity, the findings suggest that this private reception does not necessarily equate to individual or isolated consumption. The results have implications for stages such as news gathering and pro-*

*En los últimos años, ha habido una creciente tendencia de compartir noticias a través de aplicaciones de mensajería privada. Este cambio presenta desafíos significativos para el periodismo en términos de confianza en los medios y difusión de noticias. A pesar de la importancia de la investigación sobre mensajería privada y periodismo en la construcción de la opinión pública, faltan enfoques sistemáticos. Tras una revisión de literatura científica que incluyó términos como “WhatsApp”, “Telegram” y “mesoespacios”, se realizaron análisis de contenido y temáticos para identificar métodos y temas de investigación. Se recuperaron 61 documentos en 2022, de los cuales 53 son artículos en revistas WoS. Los resultados arrojan luz sobre las prácticas más comunes y, aunque WhatsApp sigue siendo la plataforma más estudiada, paradójicamente aún se usa de modo experimental. Si bien el uso de aplicaciones de mensajería privada para la recepción de noticias puede considerarse una actividad privada, los hallazgos sugieren que esta recepción privada no necesariamente equivale a*



duction, while also revealing subtopics in research on these platforms, such as the need for new digital literacies, trust as a primary casualty of disinformation, and some community practices. This approach underlines the need for transnational studies to identify common practices in the use of these technologies that are not solely driven by the particular context of a country.

**Keywords:** journalism, mobile instant messaging, news consumption, systematic review, WhatsApp.

un consumo individual o aislado. Las implicaciones de los resultados se relacionan con la recopilación y producción de noticias, pero también surgen subtemas como la necesidad de nuevas alfabetizaciones digitales, la confianza como primera víctima de la desinformación y algunas prácticas comunitarias. Este enfoque subraya la necesidad de estudios transnacionales para identificar prácticas comunes con estas tecnologías que no estén únicamente impulsadas por el contexto particular de un país.

**Palabras clave:** mensajería móvil instantánea, periodismo, consumo de noticias, revisión sistemática, WhatsApp.

## RESEARCH ON JOURNALISM AND SOCIAL MEDIA

It has been scientifically established that private messaging networks, such as WhatsApp and Telegram, are among the primary sources of disinformation dissemination (Salaverría *et al.*, 2020). However, research on the intersection of online private messaging and journalism remains in its early stages, despite the fact that the media play a central role in shaping public opinion. Digital media has been a major focus of Communication Studies in the 21st century (Montero-Díaz *et al.*, 2018). Journalism Studies have not been an exception, with recent decades seeing particular research streams exploring various aspects of Digital Journalism (Salaverría, 2019), such as its forms (e.g., news recommenders, Mitova *et al.*, 2023), its language (e.g., data journalism, Fernandes *et al.*, 2023), and its economic aspects (e.g., O'Brien *et al.*, 2020), among others.

One of the fastest-growing research domains within digital journalism is the relationship between social media and journalism (Segado-Boj, 2020). Numerous systematic reviews and meta-analyses have explored various aspects of this relationship, including how journalistic organizations select and present content on social media (Anter, 2024), how reporters and journalists use social media as a news source (Zubiaga, 2019), how users share news within these platforms (Quevedo-Redondo *et al.*, 2022), and the characteristics of misinformation and disinformation circulating through social media (Damstra *et al.*, 2021)

Most research on social media and journalism has predominantly focused on Twitter (now known as 'X'), with less attention given to other platforms (Segado-Boj, 2020). Additionally, much of this research has centered on open, asymmetric social media, while fewer studies have explored what are referred to as closed, symmetric social media or dark social media —platforms that facilitate private or semi-private conversations. In contrast, since 2015, there has been a decline in most forms of public participation related to news, such as liking, sharing, and commenting, while sharing within private messaging apps has increased (Altay *et al.*, 2024).

This study, therefore, represents the first attempt to synthesize the body of work examining the relationship between journalism and private messaging apps, as well as other closed or semi-private platforms.

## OBJECTIVES AND RESEARCH QUESTIONS

As the main goal, this article aims to provide a comprehensive overview of research on journalism and private messaging networks to date. In order to achieve this, the specific objectives are as follows:

1. Characterizing the existing research on journalism and private social media regarding methods adopted.
2. Describing the most common objects of study and most frequently analyzed topics.
3. Suggesting new lines of research by identifying empirical evidence and potential gaps in the research on private messaging networks and journalism.

Following the cited specific objectives, the article aims to answer these research questions:

1. What are the common changes in news content features (topic, news values, objectivity) resulting from MIM technologies across different countries and regions?
2. How does the use of MIM for news consumption interact with other media platforms in shaping public opinion, trust in news, digital literacies, and participatory journalism?
3. What are the actual effects of MIM on the relationships between journalists and sources, particularly in terms of critical journalistic approaches?
4. How does news consumption through MIM impact political and current events knowledge among users?
5. What type of news consumption patterns do MIM encourage?

## THE RISK OF CONSUMPTION WITH NO CONTEXT

Structure and context play a crucial role in the attention and behavior of news users. For instance, in the case of tablets, "the chronological and associative structuring of

news articles into so-called developing news stories would lead to more attention for news, and better recall and comprehension of news” (Cauwenberge *et al.*, 2015). However, social media in general, and private messaging networks in particular, offer the opposite: no context and no structure. A similar phenomenon occurs with the influence of interfaces on the navigation process. As Verhoeff (2017) pointed out, interfaces are not just something, but they force users to do something. Private messaging networks, with their “lack of interfaces,” would force users to do nothing (no comparing news, no checking links, no contrasting sources).

From the perspective of news consumption, unintentional consumption is probably one of the most related consequences of private messaging networks. Researchers have investigated the phenomenon of unintentional news consumption in diverse media landscapes. A study by Fletcher and Nielsen (2018) analyzed data from online surveys conducted in four nations (Italy, Australia, UK, and USA) to explore how people inadvertently encounter news on popular social media platforms like Facebook, YouTube, and Twitter. The research focused on individuals who don’t actively seek news on social media but may stumble upon it while using these platforms for other purposes. These “incidentally exposed” users were compared to those who don’t use social media at all. Key findings of the study include: a) users who unintentionally encounter news on social media tend to access a wider variety of online news sources compared to non-social media users, b) the impact of incidental exposure is more pronounced among younger demographics and individuals who generally show less interest in news, and c) the effect is more significant for YouTube and Twitter users compared to those on Facebook (Fletcher and Nielsen, 2018).

These results suggest that even without intentionally seeking news, social media users may be exposed to a broader range of information sources, potentially influencing their news consumption habits and knowledge acquisition. The influence of community sharing is clear.

While the concept of sharing has been a popular topic of research in journalism in recent years (Villi and Noguera-Vivo, 2017; García-Perdomo *et al.*, 2017; Noguera-Vivo, 2018), the analyzed platforms are usually social networks (X, Facebook, Instagram), and the private side of online messaging remains under-theorized. Through sharing and commenting, users actively participate in the news ecosystem.

In this context, one of the key points is, under the approach of News-Find-Me perception, the effects of this consumption on knowledge acquisition, the expression of political interests, and consequently, the quality of democracies (Gil de Zúñiga *et al.*, 2018). Trust and credibility are key in terms of selection of news sources by users who have profiles related to Communication, such as journalists, professors, or communication students (Martos Moreno and Sánchez Gonzales, 2024). However, this may not be the same for more general profiles not related to Communication or Journalism. The collaborative nature of agenda-setting construction is clear, but its effects and cycles are not. Still, it is proven that after the peak of attention for certain memes and social campaigns, social and mainstream media often play a collaborative role in generating sustained interest in specific issues (Jang *et al.*, 2016).

Under the historically optimistic statements about the origins of Web 2.0, it was said that “the wisdom of crowds” (Surowiecki, 2005) would make content with more quality more visible, because “the people formerly known as the audience” (Rosen, 2006) know more than a single journalist or media outlet. However, it has been proven that incidental exposure strengthens the news-finds-me perception and is negatively associated with news consumption (Park and Kaye, 2021).

For all these reasons, a better understanding of gaps, opportunities, and theoretical debates in research on journalism and MIM could help media produce better journalistic content to optimize their relationship with audiences.

## METHODS

This work presents the results of a systematic literature review, a methodologically rigorous examination of published scientific findings on a specific topic within a given field (Kitchenham *et al.*, 2009). This method enables researchers to identify, evaluate, and interpret existing scientific information on the subject (Ramírez-Montoya and García-Peñalvo, 2018). Systematic reviews surpass traditional literature reviews by minimizing subjectivity, avoiding biases, and prioritizing transparency and traceability (Morales-Vargas *et al.*, 2020). This approach has been widely adopted in Journalism Studies to summarize and analyze published research on various topics, including solutions journalism (Lough and McIntyre, 2023), fake news (Abu Arqoub *et al.*, 2022), and the use of artificial intelligence (Ioscote *et al.*, 2024).

This systematic review follows the SALSA Framework: Search, Appraisal, Synthesis, and Analysis (Booth *et al.*, 2012). The process began with a comprehensive search for relevant documents (Search), followed by a rigorous evaluation to exclude irrelevant materials (Appraisal). The remaining papers were then Synthesized and Analyzed to draw meaningful conclusions.

## SEARCH

On September 19, 2022, a total of 61 documents were retrieved from Web of Science using the following search query: Journalism AND (“Dark Social Media” OR “WhatsApp” OR “Instant Messaging” OR “Telegram” OR “Mesospaces” OR “Closed social media”). The search was conducted across abstracts, titles, and keywords. Of these documents, 53 were articles published in Web of Science journals, with 30 in Journal Citation Reports (JCR) and 23 in Emerging Sources Citation Index (ESCI). No publication date filter was applied to capture the entire timeline of relevant research in Journalism studies. The retrieved documents spanned from 2011 to 2022, with 2011 marking the earliest publication and 2022 the most recent.

## APPRAISAL

Next, the following inclusion criteria for the documents were established:

- Theoretical or empirical articles.
- Published in English or Spanish.
- Focused on the use of private or semi-private platforms.
- Analyzing processes of news production, consumption, or distribution of information about current events.

Documents that fell on these criteria were also excluded:

- Focused on social networks or the use of mobile instant messaging apps (MIM) in general, without specific emphasis on private platforms.
- Focused on private or semi-private platforms but not covering their use for the consumption, production, or dissemination of information/news.
- Methodological articles focused on proposing generic procedures for the analysis of private or semi-private platforms.
- Editorial notes or comments.

Two researchers independently applied the inclusion and exclusion criteria to the retrieved documents. In cases of disagreement, which occurred for 6 documents, the researchers engaged in discussions to reach a consensus on whether to include or exclude the item. As a result of this process, 30 articles (49.2% of the initial sample) were included in the final analysis, while 31 articles (50.8%) were excluded.

*Digital Journalism* dominates the sample, publishing 30% of the papers. *Journalism Practice*, *New Media & Society*, and *Profesional de la Información* follow, each contributing 6.7% of the sample. The remaining 15 venues have published one paper each, accounting for 3.3% of the sample per venue (see Table 1).

**Table 1. Number of documents per source**

Sources	n
<i>Digital Journalism</i>	9
<i>Profesional de la Información</i>	2
<i>New Media &amp; Society</i>	2
<i>Journalism Practice</i>	2

Source: Authors.

## SYNTHESIS AND ANALYSIS

The final sample was analyzed using a dual strategy. First, following Tong *et al.* (2025), a quantitative content analysis was conducted, focusing on three main categories:

1. Analyzed platforms (see Table 2)
2. Geographical scenarios of the samples (see Table 3)
3. Methods employed in the studies (see Table 4)

These variables were identified based on explicit declarations in the sampled papers, without interpretation or evaluation by the authors of this review. It's important to note that the variables were not mutually exclusive; a single study could analyze multiple platforms and geographical scenarios simultaneously, or employ more than one method.

Secondly, following Segado-Boj *et al.* (2015), we conducted a thematic analysis to identify recurring topics in the literature. The identified themes are listed and defined in section 3.2.

In addition to providing descriptive results, we conducted chi-squared tests to examine potential relationships between the methods used in each paper and the thematic issue assigned to it. These tests yield p-values and chi-squared values. A p-value closer to 0 and a higher chi-squared value indicate a lower probability that the distribution among categories (e.g., the use of a specific method to analyze a certain topic) differs from a proportional distribution, suggesting a potential relationship between two categories. The tests were conducted treating each category (method used and thematic issue of the paper) as a dichotomous variable. For example, papers that used content analysis were compared against those that did not, in relation to whether they researched news consumption or not. For brevity, only comparisons that reached a p-value below the traditional significance threshold of  $p < .05$  are reported. Comparisons not listed should be considered non-significant. Tables 6-10 present the distribution tables, comparing observed and expected counts to identify which categories show a higher frequency (observed) than would be expected from a probabilistic distribution (expected).

## RESULTS

### DESCRIPTIVE RESULTS

Research on dark social media has primarily focused on WhatsApp, which emerges as the most frequently studied platform. Other Messaging Instant Messaging (MIM) services, such as Telegram and WeChat, follow in prominence. The private uses of Open Asymmetric Social Media platforms, like Facebook or Twitter, appear less frequently in the literature (see Table 2).

**Table 2. Number of platforms analyzed in the sample**

Platforms	n	%
Whatsapp	21	70
Telegram	6	20
Facebook	4	13.3
WeChat	4	13.3
Twitter	3	10
MIMS	2	6.7
Facebook (groups)	1	3.3
SMS	1	3.3
Line	1	3.3
Facebook Messenger	1	3.3
Instagram	1	3.3
YouTube	1	3.3

Source: Authors.

Regarding geographical areas, European settings predominate in the literature. However, a significant number of studies focused on regions from the Global South, particularly Latin America and Africa, were also identified. Notably, none of the papers in the sample examined the United States or Canada (see Table 3).

**Table 3. Geographical scenarios analyzed in the sample**

Geographical scenarios	n	%
Europe	12	40
Latin America	5	16.7
Mid East	5	16.7
Africa	4	13.3
Asia	4	13.3

Source: Authors.

Regarding research methodologies, in-depth interviews, surveys, and observation emerge as the most frequently employed methods. Content analysis techniques, whether quantitative or qualitative, which focus on message examination, appear in only one out of four documents in the sample (see Table 4).

**Table 4. Methods employed in the sample**

Methods	n	%
In depth interviews	11	36.67
Survey	9	30
Observation	7	23.33
Other	6	20
Content analysis	5	16.67
Qual Content Analysis	3	10
Case Study	3	10
Focus groups	2	6.67
Experiment	1	3.33

Source: Authors.

News production emerges as the most prevalent research topic, closely followed by news consumption. In contrast, 'Audience participation and community' and 'News dissemination' receive less attention in the literature (see Table 5).

**Table 5. Topics analyzed in the sample**

Topic	n	%
News production	16	53.3
Audience participation & Community	6	20.7
News dissemination	6	20.7
News consumption	11	37.8

Source: Authors.

## QUALITATIVE RESULTS

### *"News Production"*

The rise of instant messaging platforms has significantly impacted the news production process, offering privacy and speed advantages (Bykov *et al.*, 2018). WhatsApp has emerged as the dominant platform, despite technical competition from Telegram, due to its larger social capital (Sánchez-Gonzales and Martos-Moreno, 2020). Journalists are still experimenting with WhatsApp, using it both internally for newsroom communication and externally to reach wider audiences (McIntyre and Sobel, 2019; Moon, 2021).

The evolving media landscape, characterized by disinformation and cyber-propaganda on private messaging networks (Ncube, 2019), has given rise to new

journalistic roles, such as fact-checkers, with WhatsApp being a primary source of fake content (Pacheco *et al.*, 2019). This shift has also raised ethical concerns regarding source relationships, blurring the lines between on-the-record and off-the-record information (Dodds, 2019). Furthermore, WhatsApp has transformed “journalistic cultures,” influencing editorial practices, source relationships, and idea generation (Ndlovu and Sibanda, 2021).

News Production on Messaging Instant Messaging (MIM) platforms involves creating, curating, and disseminating news through private messaging networks like WhatsApp. This process capitalizes on the speed and privacy of these platforms while addressing challenges related to ethical source relationships and misinformation spread.

This topic examines how journalists and newsrooms utilize MIM apps and closed social media throughout the news production cycle, from newsgathering to writing and editing. It also explores the potential transformations resulting from the widespread adoption of these communication tools, encompassing various subtopics within this field of study.

### ***News Production and Narratives***

Journalists view Telegram as a tool for crafting more relevant headlines and incorporating multimedia elements (Sánchez-Gonzales and Martos-Moreno, 2020). This aligns with observations by Kermani (2018) and Boczek and Koppers (2020) that news disseminated through MIM tends to be shorter, more straightforward, and includes audio-visual formats like screenshots or links. In Spain, the political chatbot Politibot succeeded on Telegram by prioritizing verification, customization, simplicity, and clarity, though challenges in usability and navigability remained, with segmented content emerging as crucial for enhancing journalistic potential (Sánchez-Gonzales and Sánchez-González, 2020).

The changes brought by MIM appear primarily formal, with no evidence of shifts in news values or objectivity (Kermani, 2018). Boczek and Koppers (2020) noted crime stories’ popularity on WhatsApp.

For news gathering, journalists use MIM to monitor events and stay updated, especially in high-volume information situations. These platforms represent hybrid interactions of news production embedded in social practices, impacting journalistic practices in information gathering, security, interpretation, and the informational cultures of journalism (Belair-Gagnon *et al.*, 2017).

### ***News Production and Audience Collaboration***

MIM facilitates audience collaboration in news production, potentially involving participation across all phases, including interpretation and editing (Kligler-Vilenchik and Tenenboim, 2020). However, this collaboration primarily focuses on news gathering, with citizens serving as sources through MIM. This approach is particularly valuable for proximity journalism, especially in covering events like traffic incidents. The use of citizen sources via MIM highlights the need

for rapid verification systems to maintain information quality (Chagas, 2018). Local news organizations benefit from MIM by gathering information from areas without correspondents (McIntyre and Sobel, 2019). Some urban communities have shown an emerging use of WhatsApp and other digital platforms for information dissemination, indicating growth in participatory practices. However, community media often lack planned strategies for managing these platforms for informational purposes (Sierra, 2021). This collaborative approach aligns with the concept of citizen journalism, where community members actively participate in news gathering and reporting. It reflects a shift in the traditional journalist-audience relationship, with audiences increasingly assuming roles as sources and even collaborators in the news production process.

### ***News Production and Sources***

MIM platforms are increasingly replacing traditional communication channels like telephone or email for interactions between journalists and their sources, including PR practitioners (Bykov *et al.*, 2018; Mashiah, 2021). These interactions can occur in either semi-public, one-to-many formats or more private, one-to-one confidential exchanges (Agur, 2019). The integration of platforms like WhatsApp into daily professional routines is creating new tensions in journalism. These include balancing open and closed communication, as well as trust and secrecy. Consequently, new forms of social interactions and co-production in journalism are emerging, shaping a hybrid media logic influenced by the growing use of chat apps (Agur, 2019). This shift reflects the broader impact of digital media on traditional journalism, where real-time communication and accessibility are increasingly prioritized. However, it also raises questions about information security, source protection, and the evolving nature of journalistic practices in the digital age.

In this context, organizations utilize WhatsApp group chats to keep journalists informed about current events and provide timely updates. This approach extends to both large, established entities and smaller organizations with limited resources for attending media events or press conferences (Dodds, 2019). WhatsApp has even been employed for conducting interviews (Ndlovu and Sibanda, 2022).

Journalists generally view the faster and more direct relationship with sources via messaging platforms positively (Dodds, 2019). This is particularly valuable in dangerous situations like armed conflicts, where WhatsApp or Telegram are considered more reliable and secure for contacting sources due to their encrypted communication. These channels help build trust with sources, with journalists exercising caution and emphasizing their gatekeeping role to maintain credibility and protect audiences from misinformation. WhatsApp plays a crucial role in facilitating communication and verification with sources, especially in remote and conflict zones. However, journalists also experience a loss of privacy, as sources can contact them at any time, potentially disregarding established schedules (Dodds, 2019). From an organizational perspective, the introduction of Messaging Instant Messaging (MIM) technologies represents a paradigm shift.

Unlike established guidelines for social media, organizations often lack specific regulations for these platforms. This is particularly significant, as improper use of MIM could strain relationships between PR practitioners and journalists (Mashiah, 2021).

### ***News Production and Media Outlets Organization***

Lastly, journalists use MIM to communicate with one another, enabling the exchange of information and recommendations across different newsrooms (McIntyre and Sobel, 2019). It also serves as an internal communication tool within newsrooms for coordinating routine tasks and procedures, and even functions as a managerial resource (Moon, 2022). During the COVID-19 lockdown, journalists increasingly relied on interactive digital platforms like WhatsApp and Twitter to conduct virtual meetings, source, and share stories (Ndlovu and Sibanda, 2022).

### **‘NEWS CONSUMPTION’**

Private consumption does not equate to individual consumption, as some topics, such as political news, are disseminated intensely on WhatsApp. This is why community and privacy boundaries are crucial when deciding whether or not to share news (Swart *et al.*, 2019). Over 60% of Spanish users receive political news via WhatsApp at least once a week, solidifying its role as a significant news source in many countries. Additionally, the percentage of users who share news through this platform is even higher—77%—with the practice being more common when the message is visual. These figures highlight the potential of instant messaging as a tool for political discussion and polarization (Pont-Sorribes *et al.*, 2020).

The way people perceive news on instant messaging platforms is influenced by the technological affordances of these private spaces. At the same time, these technological characteristics predict “multiple social media news use behaviors” (Peng and Miller, 2023). While instant messaging platforms are ideal for fostering a sense of belonging in close-knit communities—such as among friends, family, and colleagues—they are less effective at breaking the boundaries of local communities, “complicating the notion of public connection itself” (Swart *et al.*, 2018).

The utopian idea of private messaging tools enhancing news sharing is sometimes countered by studies that highlight how these tools can constrain user participation (Xu, 2022), enabling only specific forms of news sharing—often not the most effective ones. This tension arises from the challenge of integrating journalistic practices within pre-existing social spaces like private messaging networks. In fact, chat apps represent “complex and hybrid interactions of news production embedded in social practices” (Belair-Gagnon *et al.*, 2017).

In terms of user behavior patterns, it is important to distinguish between two main profiles: the incidental reader, who connects for leisure or entertainment, and the routine reader, who monitors networks for news items of interest. “Direct consumption usually leads to sharing on closed networks, while incidental exposure typically leads to sharing on open networks” (Díaz-Campo *et al.*, 2021).

News consumption on instant messaging networks involves receiving, perceiving, and sharing news content through private messaging platforms. This form of consumption is characterized by the intense dissemination of specific topics —particularly political news— shaped by the technological features of the platforms, privacy settings, and users' behavior patterns and community dynamics.

### ***Traffic and Trust***

Another area of research explores how citizens access news through MIM and the factors influencing this behavior. Studies in this field highlight the growing popularity of MIM as a news source. For instance, 64% of citizens in Spain (the focus of this study) report receiving at least one piece of political news via WhatsApp. Additionally, 38% of individuals sometimes share news about political affairs, and approximately 31% occasionally provide comments. However, while WhatsApp is increasingly becoming a source of traffic for media outlets (Mañas-Viniegra *et al.*, 2019), there is a noticeable trend of individuals placing less trust in information received through this channel compared to more traditional social media platforms like Facebook (Pont-Sorribes *et al.*, 2020).

Trust is often the first casualty in times of widespread disinformation. WhatsApp, with its unique media ecosystem, is particularly conducive to delegitimizing voting processes by spreading screenshots that mix fake news, humor, and propaganda (Ncube, 2019).

### ***A Social Activity by Default***

Other studies have not only examined the frequency of news consumption on WhatsApp and Facebook groups but also explored its nature. In this context, Swart *et al.* (2018) argue that news consumption on these platforms is primarily a social and community-building activity. As a result, the type of news shared and consumed is shaped by the characteristics of the group and the relationships among its members.

This group dynamic may be more influential than professional profiles. In fact, the content shared within some local communities closely aligns with “traditional journalistic conceptualizations of news” (Swart *et al.*, 2019).

Technological features also play a significant role in shaping news consumption on these platforms. A study on the Chinese platform WeChat (Peng and Miller, 2023) found that specific technological features, such as the option to ‘subscribe to’ or ‘follow’ a news medium, can enhance news consumption. Additionally, other research on WeChat has highlighted how the platform's affordances influence news sharing. This study revealed that features like privacy settings, limitations on news release frequency and comments, and restrictions on group and individual chat sizes enable and constrain users' participation in news distribution, promoting certain types of news sharing while limiting the social or political impact of others (Xu, 2022).

In a similar vein, WhatsApp has been utilized as an ideal platform for designing fact-checking apps that help confirm the origin of news and verify or dismiss facts (Pacheco *et al.*, 2019).

### *News Effects*

Specific research has focused on the potential implications of using MIM for news. In one such study, Valenzuela *et al.* (2021) found a moderate correlation between users' political knowledge and the frequency with which they shared public affairs content on WhatsApp.

Another study explored how the use of automated tools for news distribution on closed social media platforms influences users' perceptions and assessments of information. In this context, Sánchez-Gonzales and Sánchez-González (2020) examined users' experiences with a Telegram bot designed to provide political information. Their experiment revealed that most participants expressed a willingness to continue using the service in the future, and they rated the information received as both understandable and accurate.

### *Digital Media Literacies*

Media literacy is essential for both superficial news consumption (such as killing time or scanning news) and deeper engagement, especially when predicting social media use. In other words, research has shown that the easier a platform is perceived to be, the more likely people are to engage with news. A study conducted with this focus on WeChat confirmed this (Peng and Miller, 2021).

## **NEWS DISSEMINATION**

Researchers have distinguished between using these platforms as a one-way communication channel and using them for 'real conversation with the readers' (Negreira-Rey *et al.*, 2017). However, at the intersection of this dichotomy, some experimental projects have emerged where journalistic chatbots offer a blend of both approaches. In particular, for political information, chatbots have been well-received by the public due to two main factors: the quality of curated content and even the "emotional connection with the information" (Sánchez-Gonzales and Sánchez-González, 2020). Additionally, the customization provided by chatbots can help overcome the barrier of audience disinterest in receiving news from official media channels on private messaging networks.

The dissemination of news through instant messaging platforms has also altered the structure of news itself. A study on Telegram channels in Iran revealed that screenshots, colloquialisms, and a lack of shared structure were among the main features of journalistic content disseminated on the country's most popular private messaging platform (Kermani, 2018). While the structure of news has changed more than its content, traditional biases can still be found in news shared via instant messaging. In fact, political coverage can reflect traditional biases within information on these platforms (Ameli and Molaei, 2020).

Media outlets' strategies for news dissemination are varied, but innovations in engagement and relational approaches remain underdeveloped, even as access to news via WhatsApp is growing in some countries (Mañas-Viniegra *et al.*, 2019). As several studies have pointed out, "technological change is faster than relational or cultural change in a newsroom" (Boczek and Koppers, 2020), reminding scholars to approach any new technological wave with skepticism.

In the specific context of war correspondents, the primary reasons for using WhatsApp are to protect sources and expedite the delivery of critical information (Christensen and Khalil, 2024).

News dissemination on instant messaging networks refers to the process of distributing news content through private messaging platforms, utilizing methods ranging from one-way communication to interactive chatbots. It requires an adaptation of the news structure to the platform's characteristics, offering customization and emotional connection while balancing traditional journalistic practices with the unique features of instant messaging.

## AUDIENCE PARTICIPATION AND COMMUNITY

Instant messaging has become an integral part of journalistic practice (Mashiah, 2021) and the default method of communication for certain communities, particularly those engaged in topics such as political discourse. Research has highlighted the influence of these private —yet social— practices on citizens' understanding of political issues, which could have broader implications for journalistic practices. For instance, while "personal uses of WhatsApp were strongly predictive of engagement in protest and expressive forms of political participation," no clear relationship was found between the extremity of issue positions (polarization) and WhatsApp usage (Valenzuela *et al.*, 2019).

Audience participation is shaped not only by the topics discussed but also by traditional journalistic roles, such as gatewatching, through what can be described as "collective curation," similar to practices seen in radio journalism (Chagas, 2018). While private platforms have often been seen as an opportunity for intense collaboration with audiences during specific events, some research has found that sustained reciprocity can lead to co-creation throughout the news process, allowing citizens to play a role "in shaping the epistemologies of journalism" (Kligler-Vilenchik and Tenenboim, 2020). Insights into new forms of 'co-creation' are a common theme in related studies (Agur, 2019).

While private messaging networks can help build strong and active communities around media, these communities often lack a "planned strategy" in their use of these channels (Sierra Gutiérrez, 2021). In other words, reaching a broader audience often comes with a trade-off in terms of control.

Audience participation on instant messaging networks involves the active engagement of users in the creation and dissemination of news through private messaging platforms. This participation fosters community engagement and collaboration while enabling individuals to influence journalistic practices and contribute to discussions, particularly in political contexts.

## HYPOTHESES TESTS

“Five cases were identified where news topics were significantly associated with specific research methods, based on the chi-squared test. Specifically, dissemination was more frequently studied using content analysis  $-\chi^2(1, N = 30) = 6, p = .014$  - (see Table 6).

**Table 6. Frequency table of papers on news dissemination and using content analysis**

News dissemination		Content Analysis		Sum
		0	1	
0	Observed	22	2	24
	Expected	20.00	4.00	24.00
1	Observed	3	3	6
	Expected	5.00	1.00	6.00
Sum	Observed	25	5	30
	Expected	25.00	5.00	30.00

Source: Authors.

In-depth interviews were significantly associated with news production  $-\chi^2(1, N = 30) = 5.66, p = .017$ - (see Table 7).

**Table 7. Frequency table of papers on news production and using interviews**

News production		Interview		Sum
		0	1	
0	Observed	12	2	14
	Expected	8.87	5.13	14.0
1	Observed	7	9	16
	Expected	10.13	5.87	16.0
Sum	Observed	19	11	30
	Expected	19.00	11.00	30.0

Source: Authors.

According to the chi squared test  $-\chi^2(1, N = 30) = 4.98, p = .026$ - news consumption was more frequently studied through surveys (see Table 8).

**Table 8. Frequency table of papers on news consumption and using surveys**

News consumption		Survey		Sum
		0	1	
0	Observed	16	3	19
	Expected	13.30	5.70	19.0
1	Observed	5	6	11
	Expected	7.70	3.30	11.0
Sum	Observed	21	9	30
	Expected	21.00	9.00	30.0

Source: Authors.

Finally, audience participation was significantly studied through observation  $-\chi^2(1, N = 30) = 7.87, p = .005-$ . Additionally, the only case of an experiment was found in the study on audience participation, which also showed a positive chi-squared result  $-\chi^2(1, N = 30) = 4.14, p = .042-$  (see Tables 9 and 10)."

**Table 9. Frequency table of papers on audience and participation and using observation**

Audience & Participation		Observation		Sum
		0	1	
0	Observed	21	3	24
	Expected	18.40	5.60	24.00
1	Observed	2	4	6
	Expected	4.60	1.40	6.00
Sum	Observed	23	7	30
	Expected	23.00	7.00	30.00

Source: Authors.

**Table 10. Frequency table of papers on audience and participation and using experiments**

Audience & Participation		Experiment		Sum
		0	1	
0	Observed	24	0	24
	Expected	23.20	0.800	24.00
1	Observed	5	1	6
	Expected	5.80	0.200	6.00
Sum	Observed	29	1	30
	Expected	29.00	1.000	30.00

Source: Authors.

## DISCUSSION AND CONCLUSIONS

To date, research on the impact of MIM on news content features, such as topic, news values, and objectivity, has primarily focused on specific scenarios. While this approach provides valuable insights, the evidence may be influenced by the particular contexts of the countries or regions where the studies are conducted. The field would benefit from more transnational studies to identify common changes resulting from the introduction of MIM technologies, which are not solely shaped by the professional, economic, or political contexts of individual countries.

Similarly, the research analyzed is often conducted within parameters that are too narrowly focused on a single platform, in this case, mobile instant messaging apps. This approach overlooks the holistic nature of media consumption, particularly when addressing public opinion. Issues such as trust in news, emerging digital literacies, or participatory journalism cannot be fully understood by examining private social platforms in isolation. Instead, interdisciplinary and multi-platform approaches are crucial for gaining a comprehensive understanding of these complex phenomena.

One of the distinguishing features of the current research on MIM, private social media, and Journalism is its focus on data and samples from outside the USA and the Western sphere. Six out of ten papers in the sample examined cases and events outside of Europe and Anglo-Saxon America. This finding challenges the general dominance of Western scenarios in Communication and Media Studies (Ekdale *et al.*, 2022) and, more specifically, in the field of Social Media and Journalism (Segado-Boj, 2020). This trend may be explained by the significant prominence of WhatsApp, other MIM platforms, and private social apps in the Global South and other regions beyond the USA and Western Europe.

Studies have indicated that MIM are changing the dynamics between journalists and sources, but evidence on the effects of these transformations

remains limited. While some research has examined the perceived advantages or drawbacks of using MIM as a communication channel (e.g., Dodds, 2019), there is a need for more evidence on actual changes in relationships. For instance, it remains unclear whether the newfound proximity between reporters and sources encourages a less critical journalistic approach.

As for the methods used, experimental designs could be applied more broadly, beyond the specific topic of Audience and Participation. News consumption and even news dissemination could benefit from experimental research that provides evidence on the effects of consuming news through these platforms. Additionally, news production could expand its methodologies beyond the ethnographic approach. While current findings stem from a qualitative perspective, such data could be measured in various scenarios and analyzed in relation to other variables, which could further deepen our understanding in this area.

From the audience's perspective, future research could examine the relationships or differences in political or current events knowledge based on the use of MIM for news. Additionally, more evidence is needed regarding the type of news consumption encouraged by MIM or specific platforms. Future research could include issues related to the type of news consumption promoted (snacking or regular consumption), as well as the type of preferred sources (partisan content or neutral-balanced information).

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