ORIGINAL ARTICLE

Tweeting for peace: an analysis of twitter use in Colombia's peace process

Catalina Quinchía-Saavedra[1] · José Alberto Castañeda García[1] ·
Juan Miguel Rey-Pino[1]

Abstract

Political communication on social media is increasingly prevalent; however, the factors influencing message content and profile characteristics that contribute to its reach remain underexplored. This study analyzes these factors through a case study of a significant global political event: the Colombian peace process. We monitored the Twitter activity of 27 key accounts, comprising politicians, public figures, and organizations actively engaged in the peace process. Employing a mixed-methods research approach, we combined qualitative thematic and content analysis of the tweets with quantitative analyses to identify predictors of reach. The findings indicate that negative emotion, controversial topics related to the peace process, and opposition stance are strong predictors of retweet behavior. Additionally, user profile characteristics—such as a higher follower count and clear opposition or support stance on the peace process—also influence retweet diffusion. This study aims to elucidate the behavior associated with tweets by public figures, considering both message content and profile attributes. Understanding retweet behavior is essential, as it sheds light on the processes and variables involved in the dissemination of opinions and ideas, particularly within the fields of political marketing and communication. The originality of this article lies in its holistic approach, which integrates emotional and topical dimensions alongside profile characteristics within the context of a political event in a developing country. This research addresses a gap in the existing literature by providing comprehensive insights into the impact of social media on political communication.

Keywords Political communication · Political marketing · Retweeting behavior · Social media · Colombian peace process

✉ Catalina Quinchía-Saavedra
    cquinchia@udemedellin.edu.co

✉ Juan Miguel Rey-Pino
    jrey@ugr.es

[1] Economic and Business Sciences, University of Granada, Granada, Spain

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1 Introduction

The global penetration of internet access continues to expand, leading to an increasing number of people using social media as a primary communication channel. In 2023, more than 5.16 billion people worldwide had internet access, and approximately 4.9 billion were active on social media platforms—over 60% of the global population (Kemp, 2024). Among these platforms, Twitter has positioned itself as a prominent medium for real-time information dissemination, engaging approximately 450 million active users monthly as of 2023 (Statista, 2024). This social media site plays a particularly unique role in political communication, providing politicians, activists, organizations, and the public with a platform for dynamic engagement and real-time updates, effectively fostering a digital public sphere (Ackland, 2023; Salam-Salmaoui, 2023).

Twitter's immediacy and interactivity empower political leaders to disseminate information quickly, shape public opinion, and influence the public agenda with unparalleled speed and reach (Gurchani, 2024; Schumacher et al., 2021). The platform's features—such as hashtags and mentions—facilitate the creation of discussion communities and enable close tracking of political events, which are critical for both activism and mobilization (Ayu et al., 2022; Mousavi & Ouyang, 2021). Prior research has primarily focused on media studies related to news coverage and the representation of political actors in social interactions, as well as on the strategies leaders employ to influence their audiences (Adamik-Szysiak, 2019; Zulianello et al., 2018). These studies emphasize the mediatization of political discourse, showing how the shift from traditional mass media to social media has redefined the public sphere and public engagement (Dimitrova & Matthes, 2018).

The present study examines the case of the Colombian peace process negotiated with the FARC guerrilla movement. This process has become a worldwide benchmark as an example of international law intersecting with external actors to ensure transparency, creating a hybrid instrument for resolving a domestic crisis with international intervention. It also establishes a precedent for addressing complex political challenges globally (Kastner, 2015). The Colombian peace process sits within the context of other significant global events, such as the UK's Brexit, which reflect a trend toward domestic issues that involve extensive public consultation and hold international implications.

However, while significant attention has been given to understanding political messaging on social media, few studies explore retweeting behavior in depth, particularly concerning the emotional and content-driven factors that influence the spread of information. This gap is especially relevant within the context of major political events in developing countries, where social media platforms like Twitter play an essential role in amplifying diverse voices and perspectives. The study of retweeting behavior is thus crucial, as retweets serve as a powerful mechanism for disseminating opinions and ideas, particularly in the realms of political marketing and communication. They provide insight into the processes and variables involved in the diffusion of information, highlighting the influential role of social media in shaping political discourse.

This study seeks to illuminate the factors influencing retweet behavior among prominent figures involved in Colombia's peace process by examining both message attributes—such as emotion and topic relevance—and user profile characteristics, such as follower count and political stance. The Colombian peace process serves as a unique case study due to its substantial impact on both national and international political areas. The insights provided by this study address a gap in the existing literature by examining Twitter's role in political communication within a politically significant event in a developing country. This research contributes a holistic approach to understanding how content and profile characteristics influence retweet diffusion, providing a comprehensive analysis that enhances our understanding of the broader dynamics at play in digital political communication.

2 Literature review

2.1 The peace process in Colombia

The armed conflict in Colombia originated in the 1960 s, primarily as a consequence of pronounced political and socioeconomic disparities within the nation. This period was characterized by a vigorous ideological confrontation between left-wing and right-wing factions, significantly influenced by the geopolitical dynamics of the Cold War (Tirado Mejía, 2014).

In response to the pervasive inequality experienced by various segments of the population, numerous groups and communist movements emerged, advocating for a more equitable distribution of wealth and opportunities. Notable among these movements were the Revolutionary Armed Forces of Colombia (FARC) and the National Liberation Army (ELN), both of which initiated revolutionary activities against the central government, seeking to promote social justice and implement structural changes within Colombian society (Palacios-Perdomo & Acosta-Rámirez, 2021).

By the 1980 s, the nature of the conflict had evolved, propelled by the emergence of lucrative illicit enterprises that became integral to the financing of guerrilla operations. These enterprises included extortion, illegal taxation, and involvement in the narcotics trade (Ballentine & Nitzschke, 2003). Firchow (2013) posits that the Colombian conflict transitioned from an ideological struggle to an economic one, with the objective of securing dominance in international drug trafficking, arms trading, money laundering, and other criminal activities that yielded substantial financial returns for the involved organizations, all while maintaining a political dimension.

Throughout the duration of the armed conflict, successive Colombian governments have endeavored to negotiate political agreements aimed at achieving peace with leftist armed groups. Notable attempts include negotiations with the FARC in 1984, with both the FARC and ELN in 1994, and again with the FARC in 1999. However, these initiatives were ultimately unsuccessful, primarily due to persistent issues related to poverty and the pervasive influence of illegal drug trafficking, which obstructed the negotiation process.

Chernick (1996) argues for the necessity of collaborative solutions, wherein the government actively promotes the changes demanded by the populace through various means. A peace process is posited as a viable avenue to fulfill this objective, albeit without implying that the guerrilla factions inherently represent the interests of civil society. In this context, Schneider (2005) underscores the significance of mediation techniques, particularly in the Colombian conflict, emphasizing the need for opposing parties to collaboratively pursue joint solutions, achieve consensus, and ensure mutual commitment.

It was within this framework of commitment and shared objectives that the comprehensive peace process was initiated, under the leadership of President Juan Manuel Santos. Santos recognized the imperative of garnering political support and allies, as well as incorporating victims and military personnel into the negotiation framework. He acknowledged that armed confrontation was not a sustainable solution to the conflict, while the FARC came to understand that political power could not be attained through violence. This mutual political decision facilitated the negotiations in Havana, allowing both parties to learn from the shortcomings of prior attempts.

After more than 34 years of negotiations, characterized by numerous failures and unsuccessful endeavors, a peace agreement with the FARC was ultimately achieved. Various stakeholders, distinguished by their vested interest in the progression of this pivotal event for the nation, played a crucial role in the peace process. These actors articulated their positions clearly, emerging as influential opinion leaders. Consequently, it is essential to examine the contributions of these significant figures to gain a comprehensive understanding of the peace process in Colombia (Table 1).

2.1.1 Political marketing communications on social media

The evolution of political marketing communications on social media has fundamentally transformed the landscape of political engagement, fostering more direct and personalized interactions between politicians, activists, organizations, and the public. This transformation goes beyond traditional electoral campaigns, encompassing a wider spectrum of political discourse, public mobilization, and issue-based advocacy. Scholars like Loader et al. (2014) argue that social media has redefined political communication by creating "networked publics" where citizens not only receive information but actively participate in shaping political narratives, even outside of electoral contexts. This view aligns with the concept of "everyday political talk" proposed by Dahlgren (2005), which highlights how social media enables continuous dialogue about public issues, fostering political engagement that transcends the typical boundaries of elections and campaigns.

Political communication, as defined in contemporary scholarship, is the process by which information, narratives, and values are exchanged between political actors, media, and the public (Chadwick, 2017). While traditionally centered on elections, this definition has broadened significantly with the advent of digital platforms, where political communication now extends to include issue-based advocacy, public debates, and grassroots mobilization (Waisbord, 2018). Scholars like Papacharissi (2015) argue that political communication today encompasses the "affective publics"

Table 1 Actors in the peace process

Source	Account	Description
Alianza Verde	@PartidoVerdeCoL	Colombian center-left political party, known for its focus on sustainability and peace
High Commissioner for Peace	@ComisionadoPaz	Government entity responsible for coordinating peace efforts in Colombia, facilitating negotiations and dialogues with armed groups
Álvaro Uribe	@AlvaroUribeVel	Former President of Colombia and leader of the right-wing party Centro Democrático, known for his opposition to the peace agreement with the FARC
Andrés Elías Gil	@AndreaEliasGil	Member of the Colombian Congress, focusing on peace and reconciliation issues
Centro Democrático	@CeDemocratico	Right-wing political party founded by Álvaro Uribe, opposed to various aspects of the peace process with the FARC
Clara Rojas	@CLARAROJASG	Colombian politician and former FARC hostage, human rights advocate, and promoter of reconciliation
Claudia López	@ClaudiaLopez	Colombian politician and former senator, recognized for her support of the peace process and efforts against corruption
ETR Simón Trinidad	@SIMONTRFARC	Account associated with the FARC, focused on communication and propaganda of the armed group's ideals during the peace process
FARC	@FARC_Epueblo	Revolutionary Armed Forces of Colombia, the main guerrilla group involved in the peace process for demobilization and reintegration
Fernando Londoño	@FlondonotHoyos	Colombian politician and lawyer, known for his critical stance on the peace process and his advocacy for a tough stance against terrorism
Frank Pearl	@FrankPearl	Government negotiator in the Colombian peace talks, working on the reconciliation and demobilization process with the FARC
Humberto de la Calle	@DeLaCalleHum	Chief negotiator for the Colombian government during the peace process with the FARC, promoting peace and ending the armed conflict
Iván Márquez	@IvanMarquezFARC	FARC leader and one of the main negotiators in the peace process, advocating for a peaceful resolution to the armed conflict
Jesús Santrich	@jsantrich_FARC	Former FARC commander involved in peace negotiations and the reintegration of ex-combatants into civilian life
José Félix Lafaurie	@jflafaurie	President of Fedegán and critic of the peace process, emphasizing the importance of protecting the rights of Colombian farmers and ranchers

Table 1 (continued)

Source	Account	Description
José Obdulio Gaviria	@JOSEOBDULIO	Colombian politician and writer, member of the Centro Democrático and critic of the peace agreement, advocating for stricter security policies
Juan Manuel Santos	@JuanManSantos	Former President of Colombia and architect of the peace agreement with the FARC, awarded the Nobel Peace Prize for his efforts in the process
Ministry of Defense	@mindefensa	Official account of the Ministry of Defense of Colombia, responsible for national security and military operations within the framework of the peace process
Pablo Catatumbo	@pcatatumbo_FARC	Former FARC commander and negotiator in the peace talks, working on the reintegration of ex-combatants and the implementation of the agreement
Liberal Party	@PartidoLiberal	Colombian center-left political party, historically involved in peace processes and the defense of civil rights
Piedad Córdoba	@piedadcordoba	Former senator and Colombian activist, recognized for her role in mediating hostage releases and her support for the peace process with the FARC
Polo Democrático	@PoloDemocratico	Left-wing political party in Colombia, known for its support of social justice policies and its backing of the peace process with the FARC
Rafael Nieto	@RafaelnietoLoaiza	Colombian politician and lawyer, member of the Centro Democrático, critical of the peace agreement, advocating for a tougher stance against the FARC
Rafael Pardo	@RafaelPardo	Colombian politician, former minister, and negotiator in peace processes, playing a key role in the demobilization agreements with armed groups
Rodrigo Granda	@RodrigoGFARC	Former FARC leader and member of the negotiating team in the peace process, focused on the reintegration of ex-combatants and peacebuilding
Rodrigo Londoño	@TimoFARC	Alias "Timochenko", former FARC commander-in-chief and one of the main negotiators in the peace talks, now leader of the Comunes party
Rodrigo Rivera	@Rodrigo_Rivera	Former Minister of Defense of Colombia and ambassador, supporter of the peace process and efforts towards demobilization and reconciliation in the country

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that emerge around shared concerns or social causes. This perspective illustrates how social media fosters spaces for continuous political engagement, encouraging discussions on topics like human rights, environmental issues, and social justice that build collective identities and generate sustained public interest (Bennett & Segerberg, 2012; Freelon, 2017).

In this expanded view, political communication is not merely a top-down process directed by political candidates or parties but rather a multi-directional exchange involving diverse actors, including citizens, activist organizations, and community leaders. For instance, significant social movements, such as #MeToo and #Black-LivesMatter, demonstrate how political communication has evolved to focus not only on electoral issues but on broader social transformations (Tufekci, 2014). By facilitating a sustained, bottom-up flow of information, social media enables individuals to become key agents in political discourse, which contributes to a more inclusive and participatory model of democracy (Enli, 2017; Loader et al., 2014).

Within this broader framework, Twitter occupies a unique and critical position in political marketing due to its design and capabilities, which facilitate real-time interactions and high visibility. Twitter allows for dynamic public discourse through features like retweets, mentions, and hashtags, which reconfigure traditional political dialogue by amplifying content and extending its reach far beyond the original audience (Jungherr, 2016). Research shows that Twitter's architecture promotes viral dissemination, making it an ideal platform for rapid information sharing and political mobilization (Bossetta, 2018). Retweeting, for instance, has been shown to be a more effective tool for message diffusion than direct replies, as it allows content to be redistributed across secondary networks, increasing visibility and engagement exponentially (Kalsnes, 2016; Xinyue, 2023). By enabling this type of interaction, Twitter not only supports political campaigns but also provides a mechanism for issue-based political advocacy, where voices critical of government actions or advocating for specific causes can achieve substantial reach (Enli, 2017).

The strategic use of hashtags on Twitter has also emerged as a powerful tool for political actors and activists alike. Hashtags facilitate the creation of ad-hoc communities around specific issues, enabling users to engage in collective discussions and draw attention to various political topics (Highfield, 2016). This capability is particularly valuable for social movements and issue-based advocacy, as it allows users to participate in and shape political debates in real-time (Tremayne, 2014). For example, hashtags like #MeToo and #ClimateStrike have illustrated how Twitter can be leveraged for sustained issue-based activism, which fosters ongoing engagement rather than short-lived interactions typical of electoral events (Jackson & Welles, 2015). As a result, Twitter has redefined the strategies available for political marketing, offering tools that allow political actors to cultivate continuous engagement, build community, and sustain advocacy efforts outside traditional electoral cycles (Bennett & Segerberg, 2012).

Furthermore, Twitter's open structure and low entry barriers allow both institutional and non-institutional actors to engage in political communication, democratizing access to political discourse. Research by Marwick and Boyd (2011) shows that Twitter's real-time, conversational format enables individuals and organizations to engage audiences directly, bypassing traditional media

filters. This structure allows for a"context collapse"where diverse audiences are addressed simultaneously, making it easier for political messages to resonate across various segments of society. Twitter's role in political marketing is thus pivotal not only for the dissemination of information but also for facilitating public engagement and encouraging interactive dialogue that can influence public opinion and mobilize support around key issues (Freelon, 2017; Papacharissi, 2015).

In summary, political communication on Twitter transcends conventional electoral objectives and encompasses broader dialogues on societal issues. As Twitter enables real-time, high-volume interactions, it supports a more participatory model of political communication that enhances civic engagement and sustains discourse on topics beyond the election cycle (Chadwick, 2017; Waisbord, 2018). By providing tools for continuous public discourse and empowering users to actively shape political narratives, Twitter serves as an indispensable platform for modern political marketing and communication, reinforcing its role as a central space for ongoing civic engagement and democratic participation (Bossetta, 2018).

2.1.2 Attributes of post content as a precursor to its reach

The attributes of post content play a crucial role in determining its reach and impact. Research indicates that the ability to share breaking news is a significant factor that increases the likelihood of a tweet going viral, as it captures the attention of journalists and the public alike. Factors such as timeliness, accuracy, and human interest contribute to the newsworthiness of content, which in turn affects its dissemination (Anim et al., 2019; Kim & Ellison, 2021).

Emotional appeals in online communications have also been identified as powerful motivators for mobilization. Studies have shown that positive emotions, such as joy and empathy, can be more effective in influencing public engagement than negative emotions (Guo, 2022; Ruslan et al., 2023). While negative emotions like anger can elicit higher physiological arousal, it is the positive feelings generated by news content that often lead to greater dissemination and engagement (Morah & Uzochukwu, 2020).

The literature suggests that posts expressing either positive or negative emotions are more likely to achieve greater dissemination compared to emotionally neutral posts. This leads to the hypothesis that online posts conveying a positive or negative emotion will achieve greater dissemination than emotionally neutral posts (Jain & Pandey, 2023). Furthermore, the human dimension of emotional engagement, combined with other factors, enhances the value of posts, resulting in increased coverage and a ripple effect in public discourse (Gabehart et al., 2023).

In conclusion, the integration of social media into political marketing communications has reshaped the dynamics of political engagement. The ability to mobilize supporters through emotional appeals, the strategic use of content attributes, and the amplification of messages through retweeting and hashtags are critical components of successful political communication strategies in the digital age. Therefore, it is reasonable to propose that:

H1: Online posts related to the Colombian Peace Process that convey positive or negative emotion will achieve greater diffusion than emotion-neutral posts.

2.1.3 User attributes as precursors to the behavior of an online post

One of the most significant factors influencing the dissemination of a tweet is the relationship between the source of the message and its perceived credibility. The latter is essential for establishing trust among internet users (Hönings et al., 2021; Zhao, 2023). Recent studies indicate that several factors contribute to enhancing message credibility among users, thereby affecting content dissemination (König & Breves, 2021; Pulido et al., 2020). A critical factor is the information users gather about individuals online, which shapes their perceptions of those individuals.

Profiles belonging to individuals are often regarded as more credible and relevant than those associated with organizational accounts. According to Zhang et al. (2022), personal opinions expressed by individuals can achieve extensive public reach. Building on the two-step flow of communication theory, recent research continues to demonstrate that individuals can exert greater influence than institutions in specific contexts (Geber et al., 2017; Thorson & Wells, 2016). This suggests that:

H2: Posts published through personal profiles of influential figures involved in the Colombian Peace Process will be more widely disseminated than those published by organizations.

Esmark Jones et al. (2022) emphasize that the origin of a post, along with the thoughts, opinions, and perceptions it conveys, constitutes significant determinants of its reach and behavioral impact. Beyond the source, the content of the message itself serves as a catalyst, initiating cognitive processes that capture users' attention Hefler et al. (2020) and facilitating a closer connection between users and the authors of the message. This enhanced level of cognitive engagement can result in behavioral responses and increased information sharing (Kochan et al., 2021), particularly in instances where opinions and comments possess connotations that challenge critical societal issues. When these cognitive processes entail a degree of contagion between opposing viewpoints within a dialogue, they exert a more substantial influence on the population and generate greater exposure than complementary or supportive opinions (Brennan & Jackson, 2021).

In addition to promoting heightened cognitive engagement, personal reactions to specific events—especially those imbued with emotions such as anger, anxiety, or shock—can catalyze collective mobilization (Song et al., 2020). Consequently, we propose the following hypothesis:

H3: Posts by high-profile figures opposing the Colombian Peace Process will achieve greater diffusion than posts supporting it.

In the context of Twitter, research has established a significant association between information dissemination and leadership, wherein users possess the capacity to influence the flow of information (Salam-Salmaoui, 2023). This leadership is

particularly pronounced when opinion leaders tweet, as their followers subsequently share this content with new audiences, thereby attracting additional followers (Akdevelioglu & Kara, 2020). This process enhances the reach of the original tweet, generated by another account, as it gains access to users who were previously unaware of the information in question (Moro et al., 2023; Sun et al., 2019). Opinion leaders have been analyzed in terms of their reach, social influence, and their impact on the thoughts, emotions, and actions of others (Bakshy et al., 2011).

Messages from political actors are disseminated more widely than those from less prominent figures and exert a significant influence on the behavior of their followers (Heidenreich et al., 2022). These online profiles benefit from superior reach due to their ability to shape others'perceptions, which is often derived from their level of expertise on specific topics (Valeriani & Vaccari, 2018; Zhang & Lu, 2023). Therefore, it is reasonable to hypothesize that:

H4: Posts by high-profile political figures directly involved in the Colombian Peace Process will achieve greater diffusion than posts by users with lower public profiles.

To support the hypotheses, a systematic literature review was conducted based on inclusion and exclusion criteria, using the study description sheet proposed by Pérez Rave (2019). A total of 523 articles were reviewed, of which 64 were selected for detailed analysis, focusing on retweeting behavior and political communication on social media, particularly Twitter.

Most of the analyzed articles use case studies of events that occurred in countries with some level of global influence. The main topics addressed included: British General Elections; European Commission's Smart City Projects—RESOLUTE H2020; Tohoku Earthquake; U.S. Presidential Election Campaign; European Parliament; Spanish General Election Campaign; Donald Trump and Hillary Clinton; Arab Spring; 15-M Movement, among others (Abbas et al., 2024; Gabehart et al., 2023; Gellwitzki & Houde, 2022; Hedling, 2019; Kim & Chen, 2022; Lee & Xu, 2018 Öz & Greeves, 2024; Park et al., 2021; Piatak & Mikkelsen, 2021; Ruiz del Olmo & Bustos Díaz, 2020; Wong 2021).

Other articles focus on content characteristics: linguistic style and content properties; identification of messaging strategies to increase message propagation during high-ambiguity events; perceived"interestingness"of individual tweets; historical tweets and content characteristics of information (Naujoks & Benkenstein 2020; Rooderkerk & Pauwels 2014; Xu et al., 2010).

Some studies centered on the profile, examining retweeting behavior from the perspective of the Twitter user or the message source. These articles based their research on aspects such as: user behavior toward information dissemination; underlying motivations of Twitter users for retweeting and profile engagement; and inferring Twitter users' political inclinations (Ruiz del Olmo & Bustos Díaz, 2020; Tinati et al., 2012).

The analyzed articles reveal a gap as they study only certain variables related to retweeting behavior, such as the message or profile characteristics, but do not provide a holistic view that includes profile, message, emotions, and trending topics

in a significant event in a developing country. This research is valuable because it focuses on a peace process with international implications and investigates it comprehensively, understanding the message, the characteristics of the involved actors, the emotions produced by retweeting behavior, and the associated trending topics.

3 Methodology

To examine the factors influencing retweet behavior within the context of the Colombian peace process, this study employs a structured methodological approach, combining content and regression analysis to analyze Twitter data. This design enables a comprehensive understanding of how message content—particularly the emotions expressed—and user profile characteristics impact the diffusion of tweets.

Taking a mixed-methods approach, we conducted a qualitative analysis of the Twitter posts, applying automated text analysis for political consumer research, as proposed by Humphreys and Wang (2017). This approach comprises a number of steps for automatizing the research analysis. In step 1, the research questions were transformed into working hypotheses, as shown in Table 2. This table details the process of converting each research question into specific hypotheses, providing a foundation for empirical testing and guiding the identification of constructs to be measured (step 2).

The textual semantic analysis examined both attentional factors—how the use of words can make political consumers pay more attention to Tweets and retweet them—and also interpersonal dynamics (the political stance of political figures toward the peace process).

In the data-sourcing and data-collection stage (step 3), we selected 27 Twitter profiles (listed in Table 1) pertaining to organizations and political figures, based on their relevance and influence in the Colombian peace process dialogues. These profiles were chosen to ensure a balanced perspective, including both supporters and

Table 2 Research questions and hypothesis

Research Question	Hypothesis
How do positive and negative emotions conveyed in online posts affect the level of diffusion compared to emotionally neutral posts?	H1: Online posts conveying a positive or negative sentiment will achieve greater diffusion than emotionally neutral posts
Do posts made from personal profiles have a greater reach than those made by organizational accounts?	H2: Online posts published through personal profiles will be more widely disseminated than those published by organizations
To what extent do posts by high-profile figures opposing a process or event achieve greater diffusion compared to those supporting it?	H3: Posts by high-profile figures opposing a process or event will achieve greater diffusion than posts supporting it
Do online posts by high-profile political figures achieve greater diffusion than those made by ordinary users during significant events?	H4: An online post by a high-profile political figure involved in the main event will achieve greater diffusion than one posted by an ordinary user

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opponents of the peace process, to maintain an impartial analysis. Key actors from both sides of the debate were identified for their public stance and active participation in discussions related to the peace process, providing a comprehensive view of the discourse surrounding the negotiations.

As an initial part of the data-collection process, we analyzed the Twitter profiles of these 27 political figures, having downloaded them using the NCapture tool of the NVivo 12 Plus software. Profiles were then filtered, sorted, and encoded automatically, to enable subsequent manual encoding. The period under study ran from September 2016 to September 2017, which covered the timeframe of the official signing of the peace process and the period thereafter, thus allowing for the repercussions of the event to unfold and contribute to our analysis a year later.

The data was prepared by obtaining data units from individual tweets posted by the selected political figures, and we scrutinized the hashtags used in the posts to isolate those tweets referring to the peace process. We then unitized data under these individual tweets before analyzing their content and creating a database of the characteristics of the different political figures who were tweeting. In the methodological analysis process, an exhaustive coding of the collected tweets was carried out, evaluating a total of 1,218 publications across all selected accounts. These publications were assessed based on multiple key variables, such as the origin of the tweet (original or retweet), the type of user profile (personal or organizational), and the public stance towards the peace process. Additionally, the timing of the publications was considered in relation to the signing of the peace agreement, the volume of tweets based on the number of followers, and the nature of the message (conflict, peace and reconciliation, politics, among others).

In step 4, an operationalization approach was chosen. All of the Tweet content posted by the 27 profiles regarding the peace process during the period under study was first analyzed using Nvivo 12 Plus dictionaries for the purpose of meaning-creation and then to detect emotion. Next, all coding was manually analyzed with the help of the software's text-frequency queries. For this search, we used stemmed words, which provided consistent results. Once this was complete, the two analyses were analyzed jointly.

The fifth step involved the interpretation and analysis of the data. We conducted a thematic (semantic) analysis to identify the primary themes and sub-themes present in the dataset. Additionally, we performed an emotional analysis of the Tweets and employed content analysis to generate a frequency table of keywords, adhering to the guidelines established by Holsti (1969). To ensure a comprehensive examination of all identified themes and to achieve a more precise coding of emotions, subsequent manual coding was undertaken.

Step 6, analysis validation, by means of triangulation and peer reviews of the data. All data-gathering and analysis were performed in accordance with ethical guidelines. Tweet content is deemed to pertain to the public domain as it is shared by political and civil society actors with the intention of reaching citizens on a mass scale.

The coding process involved both automated and manual stages. Following the initial phase of automatic coding conducted by the software, the first coder engaged in a refinement process through hand coding. Subsequently, a second round of hand

coding was performed by another researcher on the team using NVivo 12 software. The second coder collaborated closely with the first coder to further refine the coded materials. This collaborative effort involved a thorough review and discussion of the automatically assigned codes to ensure they accurately represented the underlying data. Such iterative refinement is critical in qualitative research, as it enhances the reliability of the coding process and minimizes discrepancies between evaluators (Moghaddam, 2015).

Once the coding was completed, a coding comparison query was executed using the NVivo software, which facilitates the calculation of the Kappa index for inter-rater reliability. Through this collaborative effort, the coders achieved an average Kappa coefficient of approximately 0.80 (see Table 3), as calculated by NVivo 12 software, indicating a substantial level of inter-rater reliability (Dankiw et al., 2021). This high level of agreement underscores the robustness of the coding process and enhances the credibility of the qualitative analysis conducted in this study. This finding aligns with established standards in previous research, which emphasize the importance of achieving Kappa values above 0.80 for excellent reliability (Briggs et al., 2011).

Table 4 shows the variables used for analysis, including the description and categorization of each variable. The selection and description of these variables were informed by previous studies in the field of political communication on social media, though adaptations were made to capture the unique context of the Colombian peace process.

3.1 Control variables

Several control variables were incorporated into the model to enhance the validity of the hypotheses and provide a comprehensive understanding of retweeting behavior within a political marketing context. Temporal Proximity Between the Post and the Event considers the timing of a tweet relative to the occurrence of a relevant political event. As suggested by Condeza et al. (2014), immediacy is a primary motivation for sharing information, as posts closer to the event generate a heightened sense of urgency and engagement, with prior studies demonstrating a positive relationship between the frequency of social network usage and temporal proximity (Macafee

Table 3 Kappa coefficient for coding

Variable	Code	Kappa
Tweet topic	Agreements	0,8393
Tweet topic	Conflict	0,8094
Tweet topic	Peace and reconciliation	0,8227
Tweet topic	Policy	0,8106
Tweet topic	Society, communities and victims	0,8444
Tweet emotion	Negative	0,8018
Tweet emotion	Positive	0,8167

NVivo 12 coding comparison query

Table 4 Variables for analysis

Variable	Description	Measure	Variable type
Tweet origin [origin]	This variable determined whether the post derived from the original Tweet or a Retweet	A code was assigned (1 or 2, Tweet or Retweet, respectively)	Categorical (binary or dichotomous) variable
Twitter profile type [profiletype]	This variable relates to the source of the post and whether it derives from a personal or organizational account	A code was assigned (0 or 1, personal vs. organizational account, respectively)	Categorical (binary or dichotomous) variable
Twitter profile general stance toward the peace process [opinion] (Conover et al. (2011))	The political party and ideology of the political figure in question	A code was assigned (0 or 1, against or for the Columbian peace process, respectively)	Categorical (binary or dichotomous) variable
Timing of the Tweet [time] (Macafee and De Simone (2012) and Tufekci and Wilson (2012))	This variable relates to the date of publication of the post, relative to the signing of the peace agreement	The number of days' difference between the date of the Tweet posted and the date of the signing of the peace agreement. This is a variable greater than 0	Discrete quantitative (numerical) variable
Twitter profile Followers [followers] (Bakshy et al. (2011) and Kwak et al. (2010))	This variable gives an indication of the reach of a given Tweet and the number of followers the influencer has on Twitter	The number of followers of the source, derived from the N-Vivo12 tool	Discrete quantitative (numerical) variable
Tweet emotion [emotion]	Here the aim is to identify the attitude of the poster of the Tweet, based on the possible emotions or judgments that pervade the content	A code was assigned to each emotion (0, 1, or 2, Neutral, Positive, or Negative, respectively)	Categorical (polytomous) variable
Tweet topic [topic] (Tumasjan et al. (2011))	The emerging themes arising out of the keywords that are constantly repeated in the profiles under study, enabling new units of analysis	A code (1–5) was assigned to each emerging theme 1: Agreement 2: Conflict 3: Peace and Reconciliation 4: Policy 5: Society, communities, and victims	Categorical (polytomous) variable

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& De Simone, 2012; Tufekci & Wilson, 2012; Valenzuela, 2013; Valenzuela et al., 2012; Wilson & Dunn, 2011). The Main Topic of the Post identifies whether the content of a tweet is directly related to the central theme of the Colombian peace process. Tweets addressing primary topics tend to receive higher levels of interaction compared to those discussing secondary or tangential topics, as users are more likely to engage with content that aligns with prominent issues (Tumasjan et al., 2011). Furthermore, the Number of Followers of the Profile significantly influences the potential reach of a tweet, as a large follower count generally indicates credibility and relevance in the eyes of third parties (Pérez et al., 2015). Previous research shows that users with more followers tend to have their posts retweeted more frequently than those with smaller follower bases (Bakshy et al., 2011; González-Bailón et al., 2012; Kwak et al., 2010; Uysal & Croft, 2011; Zaman et al., 2010).

3.2 Data analysis

To examine the influence of message content and profile characteristics on retweet behavior, we employed a regression analysis. This statistical approach allowed us to quantify the relationship between independent variables—such as emotion, topic relevance, follower count, and stance on the Colombian Peace Process—and the diffusion of posts measured through retweet counts. The regression model enabled us to identify significant predictors of retweet behavior, providing structured insights into the factors that enhance message reach in the context of political marketing on social media. This analysis was crucial for testing the hypotheses and for drawing conclusions about the role of specific content and profile features in influencing tweet diffusion.

4 Results

Given that the Tweets analyzed were all related to 27 key players identified in the Colombian peace process, the dissemination of each Tweet cannot be explained without considering the characteristics of the political figure who published it: the number of followers they have on Twitter, the type of the Twitter profile, his general role in the peace process and therefore his position on it. Multilevel regression models are suitable for hierarchically nested data (Hox, 1998), and including profile features in explaining post retweet behavior makes sense as long as variation between profiles helps explain this. Taking the quotient between the variance due to the profile and the total variance (profiles + publications), based on the data obtained from the null model, we obtained an intraclass correlation of 0.48, which indicated that the use of multilevel regression was strongly recommended (Hox et al., 2017).

Given that our dependent variable—the number of Retweets received by a post—presented a log-normal distribution, featuring a high number of cases with a low number of Retweets (75% of the posts received fewer than 100), and were broadly dispersed across the right-hand side of the data-distribution graph (the remaining

Table 5 Comparison of alternative models

Model	Description	Information Criteria	−2 LogLikelihood (parameters)	Diff. 2LL (p-value)
Model A	Random intercept and fixed-effects for level-1 (tweet) and level-2 (Twitter profile) predictors (Equation A)[a]	AIC = 3749.73 AICC = 3749.73 CAIC = 3761.88 BIC = 3759.88	3745.73 (14)	139.14 (> 0.001)
Model B	Random intercept, random effect for level-1 predictors and fixed-effect for level-2 predictors (Equation B)[ab]	AIC = 3618.59 AICC = 3618.66 CAIC = 3655.06 BIC = 3649.06	3606.59 (18)	

Notes: [a]Maximum Variance Inflation Factor = 1.75; Residual normality test: K-S_ModelA = 1.22 ($p = 0.10$); K-S_ModelB = 1.13 ($p = 0.15$)

[b]Covariance matrix = Variance components (see Heck et al., 2013)

25% of cases being distributed over a wide interval reaching almost 6,000 Retweets), we decided to take logarithms in this variable to render it normal and thus enable the essential assumption of normality of the regression residuals (Pek et al., 2018). Once the natural logarithm of the dependent variable had been taken, it followed a normal distribution (K-S = 0.86; *p*-value = 0.45).

Given that the sample on level 2 (Twitter profiles) was not extensive, albeit it was sufficient for this type of model (Maas & Hox 2005), estimation using Restricted Maximum Likelihood (REML) was preferable, and this avoids the problem of inflation in Type -I error rates (McNeish & Stapleton, 2016). Furthermore, to avoid the issue of having sample sizes of Twitter posts with a major between-groups imbalance, for those profiles with a very high number of posts we selected 50 Tweets at random. This ensured that the profile with the most Tweets contained fewer than twice the number of posts of the profile with the least number of Tweets, and was therefore below the threshold of what Hox and Mass (2001) considered unbalanced groups (three times the size of the group with the smallest sample).

Using SPSS v.20 software, we estimated two models. Model A (with a random constant) allowed the origin of the Tweet to vary for each of the Twitter profiles under study. In Model B (with constant and random slopes), the slope of the explanatory variables pertaining to level 1 (posts) was also allowed to vary. The two models included both the available predictors of level 1 (time elapsed since the peace agreement, post type, emotion of the Tweet topic) and those relating to level 2 (profile type, general stance on the peace agreement, and number of profile followers).[1] Comparison of models, paying attention to the aforementioned information criteria

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[1] Given the construction of multi-level models, it is not possible to establish random slopes for the explanatory variables for level 2. In the particular case of REML, nor is it possible to compare models that differ in their fixed predictors. Hence, interactions between levels are not established as these, according to the formulation of the model, should be fixed (Hox, et al., 2017).

and analyzing the differences in the deviation (− 2LL) indicated the suitability of model B (Table 5).

Model A

$$LnRT_{ij} = \beta_{00} + \beta_{10}time_{ij} + \beta_{20}sense_{ij} + \beta_{30}topic_{ij} + \beta_{40}origin_{ij}$$
$$+ \beta_{01}profiletype_j + \beta_{02}opinion_j + \beta_{03}followers_j + u_{0j} + \varepsilon_{ij}$$

Model B

$$LnRT_{ij} = \beta_{00} + \beta_{10}time_{ij} + \beta_{20}sense_{ij} + \beta_{30}topic_{ij} + \beta_{40}origin_{ij} + \beta_{01}profiletype_j$$
$$+ \beta_{02}opinion_j + \beta_{03}followers_j + u_{0j} + u_{1j}time_{ij} + u_{2j}sense_{ij} + u_{3j}topic_{ij}$$
$$+ u_{4j}origin_{ij} + \varepsilon_{ij}$$

Once we had selected the model, we proceeded to interpret the significance of the coefficients in the explanation of the retweeting behavior of an online post.

Table 6 shows the estimated coefficients for each of the predictors, for the explanatory variables at both the "post" and the "profile" levels. Since logarithms of the number of retweets of the posts were taken, the reverse transformation of the coefficient was also included: $e^{\hat{\beta}}$ (Pek et al., 2018).

With regard to the level- 1 predictive variables, result provides empirical support for H1. In both cases, the coefficients show the expected direction and are significant, maintaining the distinction between whether the tweet's emotion is positive or negative (neutral emotions tweets were excluded). Specifically, it was found that,

Table 6 Estimated coefficients

Level	Variable	$\hat{\beta}$	$e^{\hat{\beta}}$	SE	t-value
-	Intercept	4.060[**]	57.978	0.354	11.462
Level 1: Tweet	Tweet time in weeks	− 0.005[*]	0.994	0.002	− 2.088
	Tweet sense (positive)	0.408[**]	1.505	0.087	4.687
	Tweet sense (negative)	0.701[**]	2.017	0.096	7.271
	Tweet sense (neutral)[a]	-	-	-	-
	Tweet topic (armed conflict)	0.079	1.083	0.110	0.719
	Tweet topic (peace and reconciliation)	− 0.253[*]	0.776	0.104	− 2.424
	Tweet topic (policy)	0.145	1.156	0.106	1.369
	Tweet topic (society, communities, and victims)	0.011	1.011	0.102	0.108
	Tweet topic (Agreement)[a]	-	-	-	-
	Tweet origin (0-other; 1-own)	− 0.307	0.735	0.211	− 1.454
Level 2: Profile	Profile type (0-person; 1 organization)	− 0.083	0.920	0.372	− 0.225
	General profile stance (0-against; 1-in favor)	− 0.890[*]	0.411	0.350	− 2.542
	Profile followers in K	0.0003[*]	1.001	0.000	2.165

[a]Reference category; [*]p-value <0.05; [**]p-value <0.01

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among those Tweets that do express a strong emotion, the diffusion increases by 50% when the emotion transmitted is positive ($e^{\hat{\beta}} = 1.505$) and extends even more (by 100%) when the emotion is negative ($e^{\hat{\beta}} = 2.017$).

Regarding the variables related to the Level 2, the coefficient of the profile's general posture vis-à-vis the Colombian peace process is negative. This suggests that the publications published by accounts that are against the peace process, in general terms, achieve a greater diffusion than those published by profiles in favor of the process. This result offers empirical support for H3.

On the non-significant predictors, no significant effect is identified for the origin of the tweet, which implies rejecting the H4, which suggests that tweets and retweets from reach the same diffusion. On the other hand, and in terms of the type of profile, the dissemination of a post is the same if it is published by a person or by an organization, rejecting H2.

For control variables the time elapsed between the signing of the peace agreement and the posting of a Tweet, the topic "peace and reconciliation" and the number of followers significantly contribute to the diffusion of the tweet. The other topics don't get better diffusion that the reference category ("agreement").

5 Discussion

According to the literature, including the work of Thorson (2014), opinion-leaders use social media posts and the further content these generate in an attempt to persuade the public on certain political issues. Among the factors that contribute to their persuasiveness are the use of current news items, prior knowledge of the topic in question, and political effectiveness. This study builds on Thorson's findings by showing that, within the Colombian peace process, emotion—particularly negative emotion—combined with oppositional stances significantly enhances the reach of tweets, consistent with research by Soroka et al. (2015), which found that negativity bias in political content tends to increase user engagement on social media. This pattern highlights the impact of emotional tone in shaping public discourse, further supporting findings by Ott (2017) regarding the influential role of negative emotion in social media diffusion.

Other scholarly studies, such as those of Bond et al. (2012), Messing and Westwood (2014), and Wu et al. (2011), examine issues of political influence on social networks more from the perspective of social influence than the analysis of specific profiles to determine the extent of their reach via the content they generate. Our findings expand on this by identifying that both user profile characteristics—such as follower count—and message content factors play a pivotal role in retweet diffusion. This observation aligns with Bakshy et al. (2011), who noted that content combined with user influence metrics, like follower size, significantly affects reach and engagement in social media contexts. Profiles with higher follower counts, particularly those with oppositional stances, achieved greater diffusion, affirming the enhanced visibility afforded to users with larger audiences and more polarized positions.

The findings of Pew Research Center (2015) demonstrate that the information and news to which people expose themselves and prefer to access derive not from

traditional media but from their social networking peers because, in this context, users build significant commitment to one another (Turcotte et al., 2015). The fact that the information appears in these media is considered a reliability factor. Our results reinforce this notion, as they suggest that users trust content shared by like-minded individuals, especially when profiles exhibit an oppositional stance toward the peace process, further intensifying engagement through retweets. This resonates with the observations of Conover et al. (2011), who showed that retweets frequently signal ideological alignment within political echo chambers, emphasizing the role of shared perspectives in content diffusion on Twitter.

Likewise, turning to the affect and emotionality conveyed by the content of a Tweet, we find studies dealing with online news, blogs, and discussion portals, among others, which conclude that the affective dimensions of the message generate impact in terms of greater user participation and attention (Bayer et al., 2012) and activate more feedback and reciprocity (Dang-Xuan & Stieglitz, 2012; Huffaker, 2010). This, in turn, further facilitates social exchange. These findings align with our own, underscoring that the emotional tone—particularly negative emotions—drives user interaction and diffusion. This emotional engagement is further supported by Marwick and Boyd (2011), who argue that the perceived authenticity and immediacy of emotions on Twitter foster a sense of connection and encourage content sharing.

The present study adds value to the extant scholarship on social media analysis, as it provides a holistic perspective, analyzing not only the post and its characteristics but also the characteristics of the Tweeter's profile. This approach facilitates joint analyses that including the feelings, emotions, retweeting behavior, and the Twitter profile in the same study. Our study's finding that profile type (personal vs. organizational) did not significantly impact diffusion is consistent with the work of McCorriston et al. (2015), who noted that organizational accounts often mimic personal profiles on Twitter, thus blurring distinctions between individual and organizational engagement. This similarity in profile behavior suggests that organizational accounts adopting personalized communication strategies can engage audiences similarly to personal profiles, an observation supported by Lovejoy and Saxton (2012) in their analysis of non-profit organizations' Twitter use.

It could be concluded that it is not only opinion-leaders, or particular emotions, or temporal proximity, or topicality that lead to greater user interaction with particular posts. The reference analysis showed that it is also those posts published by profiles positioned against a given process that achieve greater diffusion and heightened impact. This aligns with the findings of Tufekci (2014), who discussed the amplification of dissenting voices in digital spaces as a mechanism of political mobilization. This suggests that oppositional content, especially in politically charged contexts like the peace process, holds a particular power to attract engagement and foster digital activism.

With regard to the non-significant predictors, no significant effect was identified for the origin of the Tweet. This may be due to the fact that, if a profile retweets a post, this is an indicator that the re-tweeter is politically in agreement with its content (Metaxas et al., 2015).

Turning to another non-significant predictor, profile type, we found that the diffusion achieved by a post is the same, regardless of whether it is published by a person

or by an organization. Organizational profiles are very commonly found on social networks, in general, and on Twitter in particular, their characteristics often resembling those of a personal profile (McCorriston et al., 2015). This finding adds to the insights provided by Marwick and Boyd (2011), who argue that Twitter's structure allows for diverse identity performances that can blur traditional organizational boundaries, potentially explaining why user engagement does not significantly vary between personal and organizational accounts in this study.

6 Conclusions

The findings of this study provide important insights into the factors that influence retweeting behavior in the context of political communication on Twitter, particularly during a highly significant event such as the Colombian peace process. Our analysis revealed that posts conveying negative emotions tend to have the highest levels of diffusion across the platform, suggesting that users are more likely to engage with content that elicits strong emotional responses, especially those reflecting controversy or dissatisfaction. This aligns with broader trends in social media where emotionally charged or provocative content is often more engaging, as users may feel compelled to share posts that resonate with or amplify their emotions, particularly in divisive or polarizing contexts.

In terms of tweet topics, our findings demonstrate that while there are distinctions between the main subject of the peace process and secondary issues, the overall relevance of the event ensures that most topics maintain significant levels of engagement. The breadth and complexity of the peace process, including its social, political, and economic ramifications, mean that discussions on various aspects of the event continue to attract substantial attention. However, tweets addressing core issues directly related to the peace process tended to outperform those focused on tangential matters, underscoring the importance of topic relevance in driving reach.

Additionally, user profile characteristics played a crucial role in predicting retweeting behavior. As expected, accounts with larger follower counts had greater reach, reflecting the power of influence and visibility in social media dynamics. However, beyond follower numbers, the stance taken by the user significantly impacted retweetability. Tweets from profiles that expressed oppositional or critical views toward the peace process were retweeted more frequently, suggesting that dissenting opinions, particularly in politically charged environments, are more likely to generate widespread dissemination. This finding highlights the role of controversy and polarization in amplifying certain viewpoints on social media, where users may actively seek or promote content that challenges the status quo or offers alternative perspectives.

In sum, the study emphasizes the critical interplay between emotional tone, topical relevance, and profile influence in shaping the dissemination of political messages on Twitter. These results contribute to a more nuanced understanding of how political communication unfolds in digital spaces, particularly in the context of significant national events in developing countries. The integration of both emotional and topical dimensions in this research offers a comprehensive framework for analyzing social media's role in political discourse, particularly in transitional periods marked by conflict resolution and public debate. Future research could explore these

dynamics further by investigating how different social media platforms, beyond Twitter, affect political communication and by considering the long-term effects of social media engagement on public opinion and policy outcomes.

7 Implications

The Tweet must generate emotions and feelings regarding the content, as this will help improve its impact and dissemination—particularly when these emotions generate controversy or express a more negative stance vis-à-vis the main topic. To further encourage retweeting behavior on political topics, content creators should consider framing messages in ways that resonate with the audience's values or collective concerns, as well as using impactful narratives that engage users on a personal level. Additionally, integrating trending hashtags and multimedia elements such as images or videos can enhance the visibility and shareability of tweets, making them more likely to be retweeted within public discourse.

The use of political marketing communications regarding these types of issues should not only focus on the logic of the process but should also acquire greater symbolic meaning for the public, so as to generate authentic public opinion. By tapping into symbolic elements, political communication can foster deeper connections and inspire more active engagement, thereby broadening the message's reach across diverse audiences.

Furthermore, political communicators should consider aligning content with moments of heightened public interest or key political events, as posts related to significant events often experience increased retweet activity. Timely posts that reflect current discussions or hot-button issues can capitalize on the public's existing engagement, thereby reinforcing the relevance of the message. This strategy can also help reach a wider audience by embedding content within the broader context of ongoing political conversations.

In terms of professional implications, the results of this research may be useful for the public sector, especially public institutions, governments, political parties, as well as advocacy groups like NGOs, as they provide important insights into the behavior of social media such as Twitter, in relevant topics for a country and the community. The results also explain phenomena such as the extensive reach of communications posted online by those who express dissonant opinions, providing guidance on how to engage the public effectively on significant political and social issues.

8 Limitations and future research directions

While this study contributes to understanding the impact of content generated on Twitter regarding political marketing communications, yielding relevant results aligned with the research aim, it presents certain limitations that should be considered.

First, one limitation pertains to the reliability of manual coding, as content analysis conducted by a single coder may introduce subjectivity. Although peer reviews were employed to validate the analysis, future studies could benefit from using multiple coders and implementing intercoder reliability checks to enhance the robustness of the coding process.

Second, the number of participants in a process or event is necessarily limited. However, our study aimed to explain the retweeting behavior of the posts, and thus the sample included a large volume of tweets published over the course of ten months. Another limitation is the study's focus on a single time frame, which may limit the generalizability of the results across different periods. Further research could examine retweet behavior over various time frames to assess potential temporal variations in engagement patterns.

Finally, it is possible that the characteristics of the particular public analyzed in the sample exerted an influence on the results obtained. It would therefore be advisable to replicate this study in the context of other events or processes and among different publics, allowing for a broader understanding of retweeting behavior in diverse political communication contexts.

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