Communication
& Methods

A Methodological Approach to Exploring Hashtags as Digital Expressions: a Case Study on #onlinedating of Instagram

Un enfoque metodológico para explorar los hashtags como expresiones digitales: un estudio de caso sobre #onlinedating en Instagram

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Abstract:

With the pervasive presence of social media in everyday life and the diverse ways users express themselves across platforms and within platform-specific grammars, traditional research methodologies are being adapted, combined to newer, digital approaches. Among social media users' expressions, hashtags have become central to studies of social fenomena (e.g. activism, health, political participation), as they offer valuable insights into user behaviour and discourse. This article combines digital methods (Rogers, 2013, 2019) with thematic analysis (Braun & Clarke, 2006, 2020) to explore users' expressions associated with hashtags using #onlinedating on Instagram as a case study. The study aimed to identify and describe the narratives through which users express themselves in posts associated with #onlinedating, to understand the underlying dynamics of contemporary dating. While research on online dating has mainly relied on surveys, interviews and ethnographic approaches, this study highlights the potential of hashtags as user expressions for analysing related public discourse in the digital age. By focusing on the #onlinedating hashtag, the study offers a nuanced understanding of how modern dating behaviours and perceptions are communicated on social platforms. Additionaly, the findings reflect on the benefits and limitations of this methodological approach, offering insights into its broader applicability in the study of communication focusing on user-generated content and online interactions.

Keywords:
Instagram; hashtags; digital methods; thematic analysis; users' expressions.

Resumen:
Con las redes sociales siendo una parte tan importante de la vida cotidiana y las múltiples maneras en que los usuarios se expresan en estas plataformas, las metodologías de investigación tradicionales se están adaptando, combinando nuevos enfoques digitales. Entre las expresiones de los usuarios de las redes sociales, los hashtags se han vuelto centrales para los estudios sobre diversos temas (por ejemplo, activismo, salud, participación política), ya que ofrecen información valiosa sobre su comportamiento y discurso. Este artículo combina métodos digitales (Rogers, 2013, 2019) con análisis temático (Braun & Clarke, 2006, 2020) para explorar expresiones de usuarios asociadas a hashtags utilizando #onlinedating en Instagram como estudio de caso. El estudio tuvo como objetivo identificar y describir las narrativas a través de las cuales los usuarios se expresan en publicaciones asociadas con #onlinedating, para comprender la dinámica subyacente de las citas contemporáneas. La investigación sobre las citas en línea se ha realizado en gran medida mediante encuestas, entrevistas y enfoques etnográficos, este estudio destaca el potencial de los hashtags como expresiones de los usuarios para analizar el discurso público en la era digital. Al centrarse en el hashtag #onlinedating, el estudio ofrece una comprensión matizada de cómo se comunican los comportamientos y percepciones de las citas modernas en las plataformas sociales. Los resultados del estudio también abordan los beneficios y limitaciones de este enfoque metodológico, ofreciendo información sobre su aplicación más amplia en el estudio de la comunicación centrándose en el contenido generado por el usuario y las interacciones.

Palabras clave:
Instagram; hashtags; métodos digitales; análisis temático; expresiones de los usuarios.

1. Introduction

The increasing prevalence of social media platforms has transformed how individuals interact, engage in social activities and form relationships. The use of dating platforms designed to facilitate romantic connections has become a common practice and online dating a mainstream expression. Online dating research has traditionally focused on surveys, interviews and ethnographic methodologies. While these methodologies offer in-depth insights, they also have limitations in capturing digital interaction's fluid, rapidly changing nature. Furthermore, while studies on online dating focus on dating apps, they miss the opportunity to capture the adoption of other social media to engage with modern dating. As there are various motivations for social media use, different platforms to study online dating should be considered and with the availability of large-scale digital data, new research approaches should be taken into consideration.

The hashtag, a digital native object, consists of a marker whose analysis can capture dimensions of social media activity, user behaviour, social and semantic dimensions, and users' practices being part of platform grammatisation (Omena et al., 2020). As a

form of expression employed by users in their communication, the hashtag can have several functions, including but not limited to users engaging in a topic, subject discussion, or expressing an opinion or point of view (Meraz, 2017), and used to discover content by allowing a user to search for the symbol followed by a word on social media search field.

Our study proposes a methodological approach by considering Instagram as a medium that individuals turn to for the purposes of a (romantic) relationship, and associate hashtags to their posts as a form of expression. To this end, it uses the hashtag #onlinedating as an object of study for understanding contemporary patterns in dating, relationships, and inherent social dynamics. By examining the Instagram posts associated with #onlinedating, it was possible to observe user-generated content that discloses the attitudes, experiences, and practices surrounding online dating and draw conclusions on its cultural and social significance. Through a methodological exploration that combines digital methods (Rogers, 2013, 2019) and thematic analysis (Braun & Clarke 2006, 2020), we aim to contribute to the growing field of communication research, offering insights into how online interactions can be systematically studied. While reflecting on its limitations and opportunities we address the methodological challenges associated with studying hashtag-based content and how it can be approached in communication studies.

1.1. Social media and online dating

Social media has become an essential part of life for 62.3% of the global population (Kepios, 2023). People use it for a variety of reasons, like staying connected with friends and family, catching up on the latest news, following trending topics, sharing their thoughts, joining conversations, and engaging with others online (Menon, 2022). Social media also plays a significant role in romantic relationships with the term 'online dating' becoming significant when referring to the use of the internet, and digital platforms, as a means for individuals to meet, connect, and get to know one another, typically to form a romantic relationship. Such platforms are part of the process of how individuals initiate relationships (Sepúlveda, 2023), manage and maintain romantic interactions (Goldberg et al., 2022; Tosun, 2012), perceive their relationships in terms of satisfaction (Yadav & Choudhary, 2019), communicate the status of or changes in the relationship (Fejes-Vékássy et al., 2020; Hughes et al., 2021), and even break up (Gershon, 2012).

The adoption of social media within romantic relationships and consequent expressions is made possible through the platform's affordances (Goldberg et al., 2022). Affordances consist of a series of contextual limitations that shape the use of technology. They arise from the properties of the technology, the platform's technical architecture that shapes communication, and from the cultural meaning attributed, impacting users' practices (Bucher & Helmond, 2017; Caliandro et al., 2024). Affordances such as searchability help users find potential partners and obtain information even before they interact; visibility enables individuals to engage with potential partners through their profiles; and editability gives users the flexibility to edit their profiles (e.g. delete information, choose new pictures, add content to the profile and change bio) according to their goals or how they wish to be perceived by others.

Beyond affordances, users also communicate and interact through platform-specific features, such as likes, comments and hashtags. These elements form part of the social media 'grammars'. They structured communication and how users express themselves (Omena et al., 2020).

1.2. Instagram as a dating platform

As part of online dynamics, social media platforms like Instagram that do not position or present for dating end up being appropriated by their users for this purpose (Dewi & Sari, 2022; Menon, 2022). With two billion monthly active users worldwide (Dixon, 2024), whose ages are mainly between 18-34 years (62.3%), Instagram is a widely used platform, grabbing users' attention and engagement through its visual communication format.

On Instagram users can create a profile, set privacy levels, post content, share it with their audiences (e.g., family, friends and acquaintances), and engage with others through actions like viewing, commenting, or liking posts. As a result, the strategies for initiating romantic connections on Instagram can be varied. Users may adopt self-presentation strategies such as curating their biography, selecting specific photos, and writing captions; discover potential matches through mutual friends or by using the search field; use specific emojis (e.g., using the pear emoji in their bio to signal being single) (Jain, 2023) and include hashtags in their post captions.

Hashtag use, especially in public posts, enhances visibility and makes content discoverable through hashtag searches. Hashtags also serve as markers for the main subjects, ideas, events, locations, or emotions (Highfield & Leaver, 2015), framing subjects and topics (Meraz, 2017), allowing users to curate content (Meraz, 2017), and for organising and categorising photos and videos (Baker & Walsh, 2018). Hashtags are part of users' self-expression and on content related to romantic relationships, Instagram users also associated hashtags with their posts (Huges et al., 2021; Sharabi & Hopkins, 2021) as a way of giving context while constructing their Self.

As with other forms of expression on Instagram, hashtag use is governed by the platform's Terms of Service and Community Guidelines. These guidelines are designed to set expectations for user behavior, helping to foster a safe and respectful community. Things like hate speech, harassment, threats, or content promoting violence and discrimination aren't allowed. Users are encouraged to share genuine, honest content and avoid posting anything misleading, participating in illegal activities, or sharing anything that includes nudity or sexual material. Violations of these rules can result in content removal, account suspension or permanent bans (Instagram, 2024).

Social media platforms have continuously struggled to regulate harmful content as automated systems often fail to strike the right balance between over-censorship and under-regulation (Gillespie, 2018). Among the various hashtags employed by Instagram users, some dating-related hashtags have been associated with spam accounts, scams, predatory behaviour and inappropriate solicitation, leading Instagram to hide the content associated with it (IQ Hashtags n.d.). This context leads to our research question: What are the expressions associated with #onlinedating on Instagram? This study explores

how users express themselves through the hashtag #onlinedating on Instagram, aiming to uncover contemporary dating narratives. By analyzing user-generated content, it examines the role of hashtags as tools for digital self-expression and investigates how Instagram functions as a medium for discussing and engaging with such particular content. To achieve these goals, the study is structured around three specific objectives: 1) to identify and describe the key narratives and themes associated with the hashtag #onlinedating on Instagram; 2) to analyze the cultural and social dimensions embedded in user-generated content related to #onlinedating; and 3) to assess the methodological strengths and limitations of combining digital methods and thematic analysis as an approach to studying hashtag-based content.

2. Methodology

2.1. Digital methods approach

To answer our research question, we followed a digital methods approach. In the last decade, digital methods (Rogers, 2013; 2019) have been established as a methodological approach for researching social dynamics in the context of digital platforms. Digital methods consist of using 'online tools and data for the purposes of social and medium research' (Rogers, 2017, p.75). They respond to the platformisation (Helmond, 2015) of diverse daily activities (e.g. consumption, dating) and the observation of how users' information and their practices are transformed into data often for their economic value, i.e. datafication, setting research agenda (Flensburg & Lomborg, 2023).

Digital methods are a paradigm for understanding cultural and social processes that take place in and through digital media. The principle of 'follow the medium' is at the basis of digital methods. This refers to the nature, grammar, affordances, and vernaculars of digital environments for studying online phenomena and understanding how environments affect communication and interactions between individuals (Caliandro & Gandini, 2017). One example of the 'follow the medium' principle is the study of expressions and representations of content associated with hashtags (Caliandro et al., 2024). This strategy enables researchers not only to analyse how interactions are influenced by the platforms on which the study is carried out but also the social interactions that are found to be associated with that hashtag, by taking into account users' practices. To the 'follow the medium' principle, Caliandro and Gandini (2017) add a complementary perspective, approach, and research strategy: 1) 'follow the trace' referring to digital data generated as a product of any activity carried out within the scope of digital media. This digital data may come directly from data that is deliberately produced by users (e.g. comments, likes, posts) or be transactional data, meaning the data generated as a result of an activity (e.g. clicking on a link to view content) and 2) 'follow the users' whose objective is 'focusing on practices of content production enacted by consumers within digital platforms' (Caliandro et al., 2024; p.38). This research strategy refers to the active role of the users regarding generated content, but also reflects on how users' practices are a product of digital platforms affordances (Bucher & Helmond, 2017) and the extent to which they shape them.

It is important to point out that digital methods do not conflict with traditional methods, with quantitative techniques, such as social media metrics analysis (Rogers, 2018), and that qualitative techniques can be employed and combined. Caliandro & Gandini (2017) propose a qualitative approach to digital methods to integrate qualitative methods into research based on, for example, digital native objectives such as hashtags, to understand the social and cultural processes that take place on digital platforms.

Our proposal is based on the 'follow the medium' principle, analysing the user-generated content associated with #onlinedating. The data collection and analysis are detailed below.

2.2. Data collection and sample

For data collection, we followed an established approach consisting of querying Instagram through hashtags and collecting associated content (Jorge, 2019). We queried Instagram for #date, #dating, #romance, #single, or #singlelife. However, a message appeared announcing that posts marked with those hashtags were hidden because some may not follow Instagram's community guidelines. In view of this limitation, we queried Instagram for #onlinedating, and since related content was not hidden and therefore visible to all users, our choice relied on it. In April, July, and October 2023 we collected publicly available Instagram posts identified with #onlinedating. Data collection took place in three different months to obtain a heterogeneous sample. Each month, the most popular 200 posts (taking engagement as the sum of likes and comments) were collected using the 'hashtag search exporter' module of PhantomBuster[1]. Through the 'hashtag search exporter' it is possible to extract the most popular public Instagram posts linked to a particular hashtag. The corpus of data was composed of a convenience sample (n=600) of the most popular Instagram posts tagged with #onlinedating. Once Instagram has over two billion active monthly users worldwide, with the majority, 62.3%, aged 18–34 (Dixon, 2024), the study results cannot be generalized to all Instagram users. By examining the narratives and practices that receive the greatest engagement, within the context of the hashtag #onlinedating, the study reflects about content that is algorithmically prioritized by the platform. Nonetheless, being aware that the most popular posts tagged with #onlinedating may not fully capture the content created by the majority of users, these posts represent content that resonates with a broader audience. Visibility is a key feature of Instagram making these posts more likely to appear in searches or recommendations. By focusing on these highly visible posts, the study aligns with the cultural and social impact of content that receives substantial attention. This approach underscores the importance of Instagram's visibility dynamics in shaping user interactions and perceptions of the hashtag.

2.3. Data Analysis

To look into #onlinedating posts, we employed a thematic analysis (Braun & Clarke, 2006, 2020) using a ground-up approach allowing the themes to emerge directly from

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[1] PhantomBuster is a commercial service that, among other features, collects public data from Instagram. It operates through Instagram API (Application Programming Interface) and is GDPR compliant. By doing so we abided by the terms, conditions, and privacy policies of Instagram.

the posts. Instead of starting with preconceived themes, these were developed during the analysis. The visual (image) and textual (caption) elements of the post constituted the unit of analysis, with the primarily focusing on the visual component. The importance of the visual format on Instagram justified this methodological decision. The thematic analysis, operationalized on the dataset directly[2], comprised of the following steps: 1) The dataset resulting from each data collection was organised and unified, allowing researchers to engage with #onlinedating posts by observing the images and reading the captions. This step was fundamental for content familiarisation and to identify narratives within #onlinedating posts, which laid the foundation for identifying initial patterns and emerging narratives; 2) After familiarization with the posts, the first round of coding was conducted. This step involved interpreting the data (posts images and descriptions) and associating key expressions to the posts. For that a column was adeed on the dataset file. The first codes were generated by closely examining the recurring elements in the posts; 3) After that, a subsequent round of coding was undertaken. The goal was to consolidate the codes (e.g. codes that overlap were merged, and those lacking consistency were deleted) (Saldaña, 2015) and to search for themes. The review and consolidation of the codes led to the creation of the codebook. Its purpose was to foster reflection on coding decisions to improve analytical precision (Braun & Clarke, 2020) while providing guidelines for application. A label, a definition and examples were provided for each code. This process was critical for ensuring the quality and consistency of the coding; 4) With the codes consolidated, the following step was to group the codes into broader themes. This involved clustering related codes together. For example, codes related to 'personal experience', 'how to online date' or 'online dating advice' were grouped under a broader theme. After that, the codes were reviewed. This involved revisiting the dataset ensuring that the themes reflect the patterns identified in the posts. Finally, viability and reliability were checked by examining the extent to which the theme applied to various posts and confirming that the theme consistently represented the data across different posts; 5) The final step involved naming and defining the themes, so that they provided theoretical insights into #onlinedating expressions on Instagram and offered insights into the research question. Figure 1 resumes the data collection and analysis process.

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2 Google Sheet file in each row corresponded to one of the 600 posts and each column corresponded to data from that post. That included details as the image preview, the caption, and engagement metrics.

Figure 1
Research design protocol
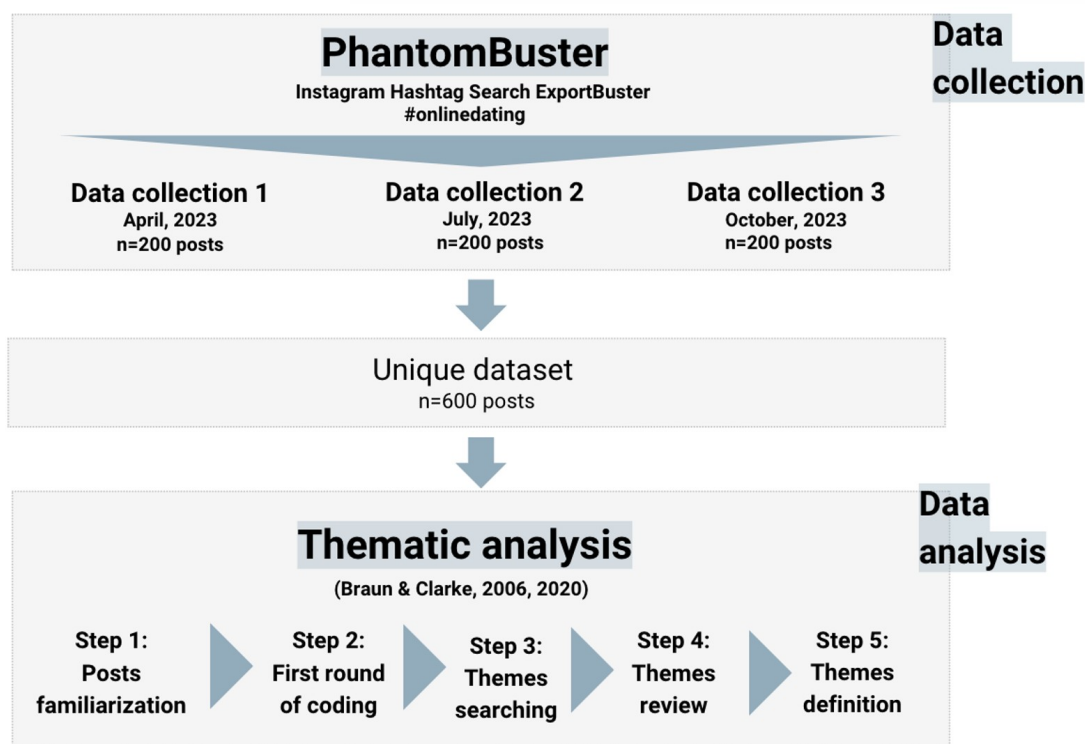
The thematic analysis process revealed four main themes: 1) The commercial side of dating, 2) Opinions, advice, and thoughts, 3) Them, him, and her body, and 4) Click to porn. Each of these themes was conceptually grounded in the data itself. They were derived from recurring patterns found within the posts on the dataset. An iterative process of engagement with the data was followed, ensuring that themes emerged organically from the posts and were continuously reviewed and refined. The validation of these themes was achieved through this constant reflection on the data and the consistency with which they represented the recurring narratives associated with #onlinedating. Table 1 resumes themes definition.

Table 1
Themes and its definition

Theme	Definition
The commercial side of dating	Posts that promote products, services, and expertise related to online dating (e.g. dating coaches, matchmakers, advisor). Points to the monetization of online dating practices.
Opinions, advice, and thoughts	Posts where users reflect on their experiences and insights related to online dating. Posts often include advice on how to navigate

	online dating, managing expectations, and recognizing outcomes. Posts also address online dating challenges and risks (e.g. protecting oneself from scams).
Them, him, and her body	Post in which individuals present themselves visually on Instagram within the context of online dating. It groups posts showcasing couples who met through online dating and those depicting individuals presentating themselves.
Click to porn	Posts that use strategies to share pornographic content. These posts typically have blurred images and display non-clickable URLs.

2.4. Ethical considerations

Data collection was carried out using a platform-approved, GDPR-compliant tool. Although there is an ongoing debate about whether content available online should be considered public or private, ethical guidelines (franzke et al., 2020) provide clarity, particularly for studies whose object of study is social media posts, and obtaining users' consent is not feasible. Following such recommendations, and even though the posts collected for this study were publicly available, meaning whoever posted them defined their profile privacy as public, we opted to treat them as private. Therefore, no posts were used for illustration purposes and no captions were quoted. Instead, we qualitatively describe the posts, in an aggregated way, ensuring that individual users could not be identified or traced through techniques like reverse image search. This approach respects users' privacy while not compromising the study's findings.

3. Findings and discussion

3.1. The commercial side of dating

Data analysis uncovered posts promoting products or services related to online dating. Criticism has been directed at the phenomenon of online dating pointing out that platforms have transformed emotions into commodities (Illouz, 2019) with such posts reinforcing a commercial aspect associated with it.

It was possible to identify posts through which users present themselves as dating coaches, experts, advisors, and matchmakers. They listed their services, explaining how they could be useful to all those who intended to take advantage of online dating, and the benefits of hiring them in order to be successful in online dating. Posts focused on aspects that are seen as difficulties with online dating, namely how to stand out among countless profiles or the difficulty in establishing meaningful connections, highlighting issues of authenticity and trust (Ellison et al., 2012).

This narrative was constructed from tips on how to find someone to develop a relationship with, suggestions on how to create a successful profile or optimise the current one (e.g. what type of photos to use, what to write in a biography), on how to

optimise the search (e.g. how to highlight interests or search for interesting profiles), or even how individuals could protect themselves from potential online scams.

'The commercial side of dating' theme also uncovered ghostwriting services. These included writing profile biographies or messages. The posts highlighted the importance of a unique and original first message in order to get a response and the importance of last messages to avoid ghosting - when someone suddenly cuts off all communication without explanation. Ghosting is associated with online dating scenario and even though it may not necessarily be harmful or conscious, users report that it can be painful and affect self-esteem (Timmermans et al., 2020). Finally, the theme grouped posts about dating apps. In addition to data related to the number of couples that meet online, matches per day, and daily messages exchanged, the posts promoted features and highlighted the advantages of premium subscriptions. These posts point to the magnitude of dating apps, as they seemed intent on attracting more users at a time when users are disconnecting from dating apps (Sepúlveda, 2024)

Visually, posts from 'The commercial side of dating' theme were characterised by strong colours (e.g. purple, green, orange). Some had photographs of someone who presented themselves as a dating specialist and others were merely graphics (e.g. lists, tips, phrases). Posts included calls to action as a strategy to engage with audiences. This happened through questions and encouragement to leave comments on posts.

3.2. Opinions, advice, and thoughts

Posts analysis revealed online dating reflections consisting of personal opinions, advice, and thoughts. Posts seem to be the result of users' introspection, offering insights into the online dating experience and providing a space for commentary. The analysis revealed posts through which users encourage others to approach online dating; nonetheless, it promotes the idea that it is important to maintain high standards and set boundaries, managing expectations while pointing to the unpredictable outcomes of online dating. Additionally, the theme gathers posts that reflect the potential drawbacks (e.g. difficulty of forming genuine and authentic connections; ghosting) or risks involved (e.g. scams) and the impact that may have on self-esteem and the importance of maintaining emotional well-being.

Additionally, 'Opinions, advice, and thoughts' theme posts also contribute to the discussion on whether to engage in online dating. Users' posts often share thoughts about the pros and cons of online dating, weighing the potential for finding a partner, considering the time required, and highlighting the emotional side. These posts frequently acknowledge that online dating is not suitable for everyone and that choosing not to engage is a valid decision.

These posts were written in the first person, as a way of intimate sharing. Visually they employ a pastel colour scheme and rely on textual elements to convey their messages.
Within the ''Opinions, advice, and thoughts' theme it was possible to identify a particular type of posts: memes. Internet memes can be defined as 'multimodal artefacts remixed by countless participants, employing popular culture for public commentar' (Milner, 2013, p.2357). These specific posts while humorous, offer a critique of online dating practices. They portray users' frustrations and disillusionment, the perceived

superficiality, and the elusiveness of meaningful connections. Additionally, meme posts suggest that while technology has expanded potential partners, it has also introduced challenges which complicate the dating experience. By using humour, these memes provide a space for users to vent their frustrations, share in collective experiences, and find solidarity within online dating experiences. Through vivid colours and familiar imagery, memes exposed the highs and lows of online dating, simultaneously mocking and sympathising with users' experiences.

3.3. Them, him and her body

The 'Them, him and her body' theme grouped two types of posts: (1) the ones depicting couples who have met through online dating, and (2) the ones portraying users, who were seeking partners. For both types of posts, visual and performative aspects of users self-presentation were central. Self-presentation in the context of online dating has attracted researchers' attention with results indicating that users pay more attention to photos than to the biography when setting up their profiles, and when evaluating other users' profiles (Vieira & Sepúlveda, 2017). This aspect is critical on Instagram as the platform is visually oriented.

Analysis showed that couples' posts feature celebratory or romantic moments (e.g. images of the couple together, often in intimate or affectionate poses), symbolising the success of their relationship. Couples are depicted smiling, hugging, or looking at each other, conveying an emotional bond. Posts captions often portray online dating as a positive experience that leads to a romantic connection. Both visual and textual elements legitimise online dating, portraying it as a valid and effective way to form relationships. These posts can be interpreted as a way of destigmatising online dating (Johanis et al., 2023).

Regarding men's self-presentation, posts were characterised by a focus on appearance, with subjects often posing in a way that emphasises style, confidence and status. Using formal clothes and full body images, men posed in front of luxury vehicles, urban landscapes, well-furnished interiors or at social events. In informal clothes, men share daily activities such as going to the gym. In these post captions, users chose common phrases, and trivialities or described what they were doing.

Posts featuring women often placed a heavy focus on their physical appearance, highlighting specific features like their breasts, cleavage, thighs, or overall body shape. Many of these images showed women posing in tight, figure-hugging clothing such as bikinis, lingerie, or other revealing outfits that emphasized their bodies.

The poses adopted were notably sexualized, frequently involving postures that drew attention to their physical attributes. These posts reflect broader cultural trends that associate women's desirability with their physical appearance, particularly within online dating, where visual clues play a significant role in attracting attention. Through post captions, users appealed for engagement suggesting Instagram users follow their profile or send a private message. Studies have revealed the use of sexualised photos on social media as a desire for attention (Ramsey & Horan, 2017).

The 'Them, him and her body' theme uncovered gendered patterns in men's and women's self-presentation reflecting traditional gender norms, positioning men as successful providers, while women are positioned as objects of desire. Although Instagram can be a space where traditional narratives regarding gender can be contradicted, this was not observed in our study and the results are in line with the literature on gender on social media that highlights the persistence of gender stereotypes (Caldeira et al., 2018).

3.4. Click to porn

Among the data analysed it was possible to observe a great visual similarity in the video format posts. Such videos were brief, 8-second video clips, where the visual content (human bodies naked) was intentionally blurred. Furthermore, auditory cues (such as muffled voices or mumbling) were discernible. These videos contained an overlay link displayed. The link wasn't clickable, but visible, seeking to encourage users to manually enter the URL into a browser. A closer look at those posts revealed that it was of a pornographic nature, a type of content prohibited by Instagram terms and conditions (Instagram, 2024). However, these posts used a series of strategies to circumvent Instagram rules, in order not to be detected as inappropriate content by moderators and eliminated. These included 1) the blurring of the image, acting as a form of suggestive imagery, hinting at the pornographic nature of the content without clearly displaying it, and 2) the non-clickable link while directing them to external pornography sites.

The examination of such posts pointed to content moderation challenges and Instagram's efficacy in protecting users. Such content suggests the need for more sophisticated content moderation tools and better efficiency in applying them. It is worth mentioning that these posts are not only public, within the reach of any user, but, at the time of data collection, had some of the greatest engagement among the content associated with #onlinedating, due to their high visibility. This can be worrying on a platform where the minimum age limit is thirteen.

These findings also provide insights into the implications of how online dating may be perceived. The presence of this type of post within the 'online dating' hashtag may reinforce negative stereotypes or misconceptions about online dating. This content could lead users to associate online dating with sexual or explicit content, as well as shape perceptions about the types of individuals who engage in online dating. Such portrayals may contribute to stigmatisation, particularly among more conservative or cautious individuals who may approach online dating with scepticism.

When comparing our study's findings with other research (e.g. Jorge, 2019; Fejes-Vékássy et al., 2022; Gibbs et al., 2015; Jaramillo-Dent & Pérez-Rodríguez, 2021) focusing on the use of hashtags in digital discourse, several alignments emerge despite studies focus on differences areas. These alignments are particularly evident in self-presentation, performativity, and commercial aspects. Instagram enables users to commodify personal identity through self-presentation, whether related to topics like death (Gibbs et al., 2015), love (Fejes-Vékássy et al., 2022), or personal development (Jorge, 2019). From a broader perspective, our findings are also consistent with those of other studies, showing that hashtags are not only used to organize discourse but also to

engage with specific communities or narratives. The study findings also contribute to the broader discourse on Instagram's role as a visual and performative space, shaping and commodifying personal experiences this aspect is particularly interesting regarding the study of relationships, and identity in the digital age. This gives room to question the role of social media platforms, going beyond dating platforms, questioning and identifying specific dynamics.

4. Conclusion

The study set out to explore representations associated with #onlinedating in order to understand the underlying dynamics of contemporary dating. Its importance is justified by the appropriation of Instagram for dating-related purposes (Dewi & Sari, 2022; Menon, 2022) and the awareness of online dating as part of the internet lexicon associated with relationships. It combined digital methods and thematic analysis as a methodological approach. Using the principle 'follow the medium' (Caliandro & Gandini, 2017; Caliandro et al., 2024) it focused on one of the platform's grammars - hashtag - through which users express themselves, considering the associated posts as part of the public discourse and conversations about the topic. Combining digital methods with thematic analysis allowed a qualitative interpretation of the data to uncover emerging themes and narratives providing insights into the meanings, motivations, and cultural aspects and behaviours around online dating. The four themes that emerged from the posts revealed the multifaceted representations of online dating within the context of Instagram, offering a nuanced understanding of how users engage with and portray this phenomenon. These themes pointed to a commercial side of online dating associated with a market of products; how, through personal reflections and opinions, users acknowledge the potential but also the risks of online dating, sometimes resorting to the meme format to introduce some humour to the topic; how users self-presentation revealed gendered patterns and traditional stereotypes, despite the potential for platforms like Instagram to challenge these narratives, and finally, they showed how users resort to strategies to circumvent platform regulations, as regards inappropriate content, pointing to the need for more effective measures on the part of the platform.

This article contributes to discussion on hashtags as an object of study and to communication studies. Although it focused on a specific hashtag, it shows the importance of these grammars, in the context of Instagram, as they function as forms of expression and discourse on a certain topic. It also contributes to the discussion about how hashtags can be methodologically studied. Research may look deeper into how hashtags function differently across various platforms (e.g., Instagram, X, TikTok) taking in consideration platforms affordances, media ideologies and idioms of practice (Gershon, 2010). Cross-cultural comparisons of hashtags could explore how users from different cultural or linguistic backgrounds engage with hashtags in their communication and the specificities of such expressions. Building on findings related to commodification, future research could analyze influencer culture. Research could further examine how hashtags are used to construct, perform, and negotiate identities, particularly in the context of intersectionality.

The methodological approach presented employed opportunities for those researchers engage with communication studies. These include access to data on subjects that may

be difficult to access using traditional methods, users' content from communities or groups that may be difficult to reach using traditional methods, data from users from different geographical locations, and diverse forms of data (e.g. text, images, videos, emojis) analysis of which can provide a richer understanding of the meaning constructed. Also makes it possible to access large volumes of data, from a big data perspective, and to data that is immediately available, and which can be collected quickly compared to other options.

As with other methods, there are also challenges associated with the one employed. These include conceptualising the research, according to the specificities of the medium to reflect on what the starting point will be and on the definition of the research question (Sepúlveda et al., 2024), the need to master techniques or have access to data extraction tools (e.g. programming knowledge to access the API or paying for commercial services), and the manual work associated with cleaning, organising and managing the datasets, taking into account what type of data the researcher has access to those the one that the platform decided to make available.

Nonetheless, like other methodological approaches the one used also presents limitations. It is worth highlighting the constant generation of data making the research correspond to a specific section; the non-representativeness of the results, as they come from a convenience sample, and the fact that the sample is composed only of public data. Therefore, those users whose profiles are private, but use the hashtag in question, are not included and not reflected in the results. One of the limitations experienced in the case study presented was the fact that other dating-related hashtags have been hidden by Instagram. This points to the mutation of data and the inherent unpredictability of its accessibility (Salganik, 2019). Finally, given that social media uses algorithms to order and suggest content and accounts, posts considered the most popular may be products of this algorithmic action, which influences the content that users see and interact with.

As a suggestion to overcome methodological limitations, qualitative techniques, such as ethnography, interviews, or focus groups, could enrich the understanding of digital data and analysis results. These qualitative methods could give perspectives that may not be evident in the result from the public digital data analysis. Could add extra layers to the results analysis and more depth to them. Moreover, researchers can explore the potential of combining digital data with network analysis to map relationships and interactions within online communities. This could provide deeper insights into how users form connections or engage with specific discourses (and hashtags). Another option involves adopting a longitudinal perspective being able to capture digital narratives unfold over time. These future directions point to the versatility and adaptability of the methodological approach. The main idea lies in the proposal that data resulting from digital methods can be combined with other methods, depending on the analysis to be carried out and in an optimal way to obtain answers to the defined research questions.

Regarding the study in question, one of the great strengths was the combination of digital methods, with thematic analysis, providing a more comprehensive understanding of the hashtags in study, but also how this can be replicated to study other themes in the area of communication, not just referring to Instagram. Nevertheless, researchers must

understand the environment in which research is carried out. Although hashtags constitute a common grammar for several social media, they have specificities depending on the use or meaning attributed to the platform. Therefore, the methodology is not a one-size-fits-all approach. It needs to be adopted and thought about, with an understanding of the functioning and affordances of each platform as a necessary preliminary step to frame the problematic, to contextualise the available data, and to understand the findings.

5. References

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