

Band of blood brothers: exploring visibility management and networking among Twitter users identifying as Filipino men living with HIV

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Band of blood brothers: Exploring visibility management and the network structure of Twitter users identifying as Filipino men living with HIV

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Keywords:	HIV, networked publics, social network analysis, Twitter, visibility management, X, social media, online ethnography
Abstract:	<p>The Philippines continues to grapple with a rising number of HIV cases, particularly among Filipino men who have sex with men. Notably, Filipino men living with HIV (FMLWH) are visible on Twitter (now X), despite Facebook's prevalence in the Philippines. The Twitterverse of FMLWH may be imagined as networked publics, with these users negotiating visibility management in the face of HIV-related stigmas and navigating context collapse in a high-visibility space. In this study, we explore the visibility management practices of Twitter users identifying as FMLWH and subsequently map their network structure. Our mixed-methods approach combined analysis of online trace data from 1,447 public Twitter accounts with in-depth interviews conducted with 24 Twitter users.</p> <p>Findings revealed that FMLWH employed a range of visibility management practices on Twitter, including the use of succinct identifiers to disclose HIV status, the maintenance of pseudonymous identities, and a strategic shift from partial to greater visibility when engaging with other FMLWH in private communication spaces. Participants expressed a strong inclination to connect with fellow 'blood brothers' and were frequently directed to these users through algorithmic recommendations rather than word-of-mouth.</p> <p>An expansive network comprising 302,934 'follow' ties connected all but two of the 1,447 users. Network analysis also showed high reciprocity and short distances between actors. Despite these metrics, a relatively low degree of interconnectedness was found, suggesting that users formed their own smaller pockets of conversation.</p> <p>Overall, FMLWH exhibited a deliberate effort to manage their visibility on Twitter and demonstrated a level of connectivity and engagement that might not naturally occur in real-world settings. Furthermore, the affordances of Twitter facilitated the open disclosure of HIV status, traditionally considered a private and sensitive matter. These findings warrant further investigation into the formation of networked HIV social identities and the emergence of pseudonymous networked counterpublics among FMLWH.</p>

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ABSTRACT

The Philippines continues to grapple with a rising number of HIV cases, particularly among Filipino men who have sex with men. Notably, Filipino men living with HIV (FMLWH) are visible on Twitter (now X), despite Facebook's prevalence in the Philippines. The Twitterverse of FMLWH may be imagined as networked publics, with these users negotiating visibility management in the face of HIV-related stigmas and navigating context collapse in a high-visibility space. In this study, we explore the visibility management practices of Twitter users identifying as FMLWH and subsequently map their network structure. Our mixed-methods approach combined analysis of online trace data from 1,447 public Twitter accounts with in-depth interviews conducted with 24 Twitter users.

Findings revealed that FMLWH employed a range of visibility management practices on Twitter, including the use of succinct identifiers to disclose HIV status, the maintenance of pseudonymous identities, and a strategic shift from partial to greater visibility when engaging with other FMLWH in private communication spaces. Participants expressed a strong inclination to connect with fellow 'blood brothers' and were frequently directed to these users through algorithmic recommendations rather than word-of-mouth.

An expansive network comprising 302,934 'follow' ties connected all but two of the 1,447 users. Network analysis also showed high reciprocity and short distances between actors. Despite these metrics, a relatively low degree of interconnectedness was found, suggesting that users formed their own smaller pockets of conversation.

Overall, FMLWH exhibited a deliberate effort to manage their visibility on Twitter and demonstrated a level of connectivity and engagement that might not naturally occur in real-world settings. Furthermore, the affordances of Twitter facilitated the open disclosure of HIV status, traditionally considered a private and sensitive matter. These findings warrant further investigation into the formation of networked HIV social identities and the emergence of pseudonymous networked counterpublics among FMLWH.

Keywords: HIV, networked publics, online ethnography, social media, social network analysis, Twitter, visibility management, X

29 INTRODUCTION

30 In this study, we explore the visibility management practices of Filipino men living
31 with HIV (FMLWH) on Twitter (now X) and subsequently map out their network structure.
32 The emphasis on FMLWH is driven by the Philippines' continuous struggle with an upward
33 trend in HIV cases, particularly among Filipino men (Department of Health- Epidemiology
34 Bureau, 2019; UNAIDS, 2022). Moreover, the substantial presence of FMLWH on Twitter—
35 a high-visibility space—underscores the significance of this social platform for this
36 vulnerable and stigmatised user base.

38 HIV Incidence and Stigma in the Philippines

39 While new HIV infections are declining in most of Southeast Asia (UNAIDS, 2023),
40 the Philippines stands out with a rising HIV incidence, marking it as the country with the
41 fastest-growing HIV epidemic in the Western Pacific region (Gangcuangco and Eustaquio,
42 2023). New infections surged by 327% between 2010 and 2021, with daily diagnoses
43 reaching 41 by 2022 (Department of Health- Epidemiology Bureau, 2022; UNAIDS, 2019).
44 Moreover, Filipino men bear the brunt of the epidemic, comprising 94% of diagnosed cases,
45 with a significant portion involving men who have sex with men (Department of Health-
46 Epidemiology Bureau, 2022).

47 Unlike other chronic conditions, such as cancer, diabetes, and heart disease, HIV is
48 disproportionately burdened by social stigma (Herek, 1999; Taylor, 2001). In the
49 Philippines, negative attitudes toward people living with HIV (PLWH) persist, encompassing
50 stigma and discrimination based on gender identity and sexual preferences (Laguna and
51 Villegas, 2019). This is further compounded by the influence of Roman Catholic values,
52 which can contribute to the intersectional stigma experienced by Filipinos who are both queer
53 and living with HIV (Adia et al., 2018; Pamoso et al., 2024). Adia et al. (2018: 322) found
54 that Filipino men who have sex with men with HIV experienced both HIV-related stigma and
55 stigma associated with homosexuality, often linked to concepts of “morality, uncleanliness,
56 and sin.” Furthermore, Pamoso et al. (2024: 9) described the stigma affecting Filipino gay
57 and bisexual men living with HIV as being perpetuated by norms of “heteronormativity,
58 patriarchy, and machismo.”

59 **FMLWH and Twitter Use**

60 The literature acknowledges the potential positive impact of social media on the lives
61 of PLWH (Cifor and McKinney, 2020; Gaysynsky et al., 2015; Taggart et al., 2015). Among
62 the array of available social media platforms in the Philippines, FMLWH or ‘blood brothers’
63 are prominently visible on Twitter, a microblogging platform known for its 280-character
64 limit (Murthy, 2013: 3). While it has since been renamed to X, we will continue to use the
65 original platform name—Twitter—throughout this paper as the research was conducted prior
66 to the rebranding.

67 The most popular social media platform in the Philippines is Facebook, being used by
68 96% of Filipinos aged 16–64 (Kemp, 2022: 54). By comparison, Twitter ranks only fifth and
69 reaches 60% of this user base (Kemp, 2022: 54). Nevertheless, the growing presence of
70 FMLWH on Twitter suggests a special attraction to this platform for this community. On
71 Facebook, connections are inherently reciprocal, resembling traditional friendships.
72 Conversely, Twitter allows for one-way connections, enabling a more decentralised and
73 interconnected communication style (Schmidt, 2014: 6).

74 Moreover, Twitter allows users the option of maintaining a higher degree of
75 anonymity compared with platforms like Facebook, which encourages account owners to
76 supply their singular, ‘true’ identity (van Dijck, 2013). As Froomkin (1995) points out, the
77 internet facilitates both anonymity and pseudonymity, which can be either traceable or
78 untraceable. Despite integrity concerns surrounding online anonymity, (Donath, 1999;
79 Johnson, 1997), maintaining pseudonymous or anonymous identities can afford social media
80 users a sense of online disinhibition (Suler, 2004). This allows them to disclose sensitive
81 information about themselves, including aspects that might otherwise lead to stigmatisation
82 (Boudewyns et al., 2015; Schlosser, 2020).

83 While considerable research has examined the role of social media as a platform for
84 coping (Strand, 2011), obtaining information (Malik et al., 2021; Taggart et al., 2015), and
85 seeking social support (Bar-Lev, 2008; Chen et al., 2019; Chen and Shi, 2015; Cifor and
86 McKinney, 2020; Mo and Coulson, 2010; Strand, 2011), the practices employed by PLWH to
87 regulate their visibility on public social media platforms remain underexplored. Moreover,
88 despite significant research showing the positive impact of online networks on the quality of
89 life of PLWH (Emlet, 2006; Harris et al., 2015; Nobre et al., 2016; Sandstrom, 1996; Veinot,
90 2009; White and Cant, 2003), empirical data mapping their actual social media ties is lacking.

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3 91 These arguments, coupled with a research gap in men's experiences with technology (Lohan
4 and Faulkner, 2004), most notably with digital media (Light, 2013, 2017a), support the need
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6 92 to foreground the social media experiences of men living with HIV.
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11 95 **Negotiating HIV Disclosure and Visibility**
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15 96 The management of visibility is a crucial aspect of HIV communication. Visibility
16 plays a central role in decisions about disclosing one's HIV status, a process that can cause
17 significant distress for PLWH (Buseh et al., 2006; Doyal and Anderson, 2005; Paxton, 2002),
18 despite HIV disclosure being necessary as it serves as the first step toward obtaining social
19 support (Greene et al., 2003; Serovich, 2001). In turn, the invisibility of PLWH presents
20 significant challenges to the effective provision of HIV prevention, treatment, care, and
21 support services (Zhou, 2013).
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27 103 For PLWH, virtual platforms can be more advantageous than in-person interactions,
28 as they afford "space independency, anonymity or 'pseudonymity', invisibility, disinhibition,
29 and status neutralization" (Prestin and Chou, 2014: 189). Reframing HIV disclosure in online
30 spaces as an act of empowerment can challenge stigma by shifting the focus from
31 burdensome disclosure to informed self-expression, fostering a more nuanced and
32 compassionate public discourse surrounding HIV (Philpot et al., 2022; Zhou, 2013).
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38 109 Building upon these ideas, Lasser and Tharinger's (2003) theory of visibility
39 management provides a framework for understanding how FMLWH navigate the process of
40 disclosing their HIV status, and the extent to which they choose to do so. According to Lasser
41 and Tharinger (2003: 237–238), visibility management describes the continual process by
42 which individuals utilise a range of strategies and modes of communication to disclose
43 private information to others. Moreover, visibility management exists on a continuum
44 ranging from minimal to extensive disclosure, reflecting the dynamic interplay between
45 individuals and their social environments (Lasser and Tharinger, 2003: 237–238).
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53 117 Although visibility management has primarily been applied to research on the coming
54 out of gay, lesbian, and bisexual individuals, Lasser and Tharinger (2003) contend that it is
55 applicable to other contexts involving active self-management (Dewaele et al., 2013, 2014;
56 119 Song et al., 2022; Twist et al., 2017), including the experience of living with HIV.
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122 **Visibility and Social Media**

123 While extensive research on HIV disclosure exists (Ankrah, 1993; Arnold et al., 2008;
124 Chaudoir et al., 2011; Doyal and Anderson, 2005; Evangel and Wroe, 2017; Smith et al.,
125 2008), research specifically examining how PLWH manage their visibility in socially
126 mediated environments is limited (Davis and Flowers, 2014; Milosavljevic, 2018; Philpot et
127 al., 2022). Davis and Flowers (2014) explored the use of 'metaphorical identity talk' as a
128 form of strategic in(visibility) on social media, allowing for nuanced disclosures without
129 explicitly mentioning their HIV status. Similarly, Milosavljevic (2018) utilised the concept of
130 strategic in(visibility) in an ethnography of gay dating sites to explore the HIV disclosure
131 strategies of gay men in Serbia. Philpot et al. (2022) emphasised the importance of context in
132 visibility strategies, highlighting the value of limiting audiences to those knowledgeable
133 about HIV and likely to respond positively (Philpot et al., 2022: 883).

134 Negotiating visibility on social media may be further understood through Couldry's
135 concept of 'presencing,' which encompasses "individuals' and groups' acts of managing
136 through media a continuous presence-to-others across space" (Couldry, 2012: 38). Given that
137 presencing involves strategically circulating information and self-representations online to
138 establish a public presence (Couldry, 2012: 38–39), it is understood to occur primarily within
139 high-visibility social media spaces. On Twitter, presencing is achieved through a series of
140 actions: registering a handle; providing a name and biographical description, uploading
141 profile and header images; and ultimately, engaging in public tweeting (O'Reilly and
142 Milstein, 2009).

143 Presencing practices on Twitter are shaped by platform affordances, defined by
144 Ronzhyn et al. (2023: 3181) as the "perceived actual or imagined properties of social media,
145 emerging through the relation of technological, social and contextual that enables and
146 constrains specific uses of the platforms." One key affordance for users is visibility, allowing
147 them to intentionally make personal information, user activity, and connections accessible to
148 others (Devito et al., 2017; Ramirez, 2018; Treem and Leonardi, 2013). According to
149 Malhotra (2024), social media environments can be delineated into high-visibility platforms,
150 like Facebook and Twitter/X, and low-visibility platforms, like instant messaging
151 applications and private chats within social media. Therefore, the presencing practices of

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3 152 FMLWH on Twitter, a public space where they interact with others without anticipating
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5 153 complete privacy (Light, 2017b: 232), merit study.
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9 154 Visibility and presencing become particularly complex for PLWH participating in
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11 155 Twitter where multiple audiences may encounter them. Unlike the more controlled
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13 156 environments of HIV discussion forums, social media platforms often exhibit ‘context
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15 157 collapse’ (Marwick and boyd, 2011; Marwick and Ellison, 2012), where the diverse social
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17 158 circles of an individual converge. This blurring of social contexts can lead to diminished
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19 159 privacy (Marwick and boyd, 2014) and necessitate more nuanced performance strategies for
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21 160 PLWH to navigate the complexities of visibility and maintain control over their online
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23 161 identities.
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28 163 **PLWH as Networked Publics**
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31 164 When participating in social media, individuals shift from being mere media
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33 165 audiences or consumers to ‘networked publics’ comprised of “reactors, (re)makers and
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35 166 (re)distributors, engaging in shared culture and knowledge through discourse and social
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37 167 exchange as well as through acts of media reception” (Ito, 2008: 3). boyd (2011: 41) further
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39 168 describes networked publics as “simultaneously a space and a collection of people,”
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41 169 structurally distinct from other publics. Bypassing ‘real-name web’ expectations (Hogan,
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43 170 2013), Twitter creates a user collective that can also be understood as ‘pseudonymous
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45 171 networked publics,’ which Light (2017b: 244) defines as “public spaces in which we do
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47 172 things alongside or with others, where there is no expectation of complete privacy but where
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49 173 the use of real names is not warranted.” Moreover, these public spaces facilitate
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52 174 counterpublic communication, allowing users to explore ideas related to identity, community,
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54 175 and relationships, and to develop strategies for asserting or adapting their identities
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56 176 (Renninger, 2015: 1516).
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177 boyd (2011) argues that information flows and social interaction within networked
178 publics are reconfigured by four affordances: 1) persistence (online expressions are
179 automatically recorded and archived); 2) replicability (content is easily reproduced); 3)
180 scalability (content is widely visible to others); and 4) searchability (search engines may be
181 used to locate other users or expressions made by other users).

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3 182 Alongside affordances, algorithms shape user connectivity and interaction in datafied
4 spaces (Galloway and Thacker, 2007; Hartley et al., 2023; van der Nagel, 2018). Algorithms
5 produce 'calculated publics' (Gillespie, 2014) or 'algorithmic publics' (Christin, 2020;
6 Hartley et al., 2023), comprising imagined collectives based on shared affinity, as seen in
7 Twitter recommendations like 'who to follow' and 'you might like.' Thus, both affordances
8 and algorithms facilitate the visibility of FMLWH on Twitter, resulting in new
9 communication dynamics that connect them in ways that might not occur in ordinary
10 circumstances.
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18 190 **Study Objectives**
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22 191 Drawing on these theoretical perspectives on visibility and publics, we conducted this
23 study to analyse, firstly, the visibility management practices of Twitter users identifying as
24 FMLWH, and, secondly, the network structure of these users.
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30 195 **METHODS**
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32 196 **Ethical Considerations and Researcher Reflexivity**
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35 197 The primary researcher's interest in this study arose from discovering Twitter as a
36 significant platform for FMLWH. Witnessing the role of Twitter in his friend's recovery
37 from HIV diagnosis sparked curiosity about how individuals leverage social media for health
38 and support. Recognising his position as an outsider to this online community, the primary
39 researcher employed unobtrusive ethnographic methods to gain an empathic understanding of
40 their Twitter practices. Informed by Hine (2000), these involved observing the community's
41 online interactions, analysing their self-presentation practices, and identifying prominent
42 voices within the community. To uphold user privacy, the primary researcher alone had
43 access to raw data; the rest of the research team worked with aggregated, anonymised data.
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52 206 The study was guided by the ethical principles for internet research set forth by the
53 Association of Internet Researchers (franzke et al., 2019), with a particular emphasis on
54 protecting involved subjects from potential harm. The study also adhered to the standards for
55 research involving PLWH, as outlined in the Philippine National Ethical Guidelines for
56 research involving Human Participants (Philippine Health Research Ethics Board, 2022).
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3 211 Given the focus on publicly viewable Twitter accounts, online lurking was deemed
4 ethically justifiable. These accounts constitute a 'public and open setting' (Lofland and
5 Lofland, 1995: 32), accessible to anyone with internet access, regardless of whether they
6 follow users or have their own account. Considering these factors, we presumed that users
7 behind these accounts were aware that their Twitter content was publicly accessible.
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13 216 Informed consent was obtained from all users whose Twitter content is showcased in
14 this paper. To protect users' privacy and thwart possible information retrieval, we employed
15 pseudonymisation, heavy disguise techniques (Bruckman, 2002), and ethical fabrication
16 procedures (Markham, 2012). Moreover, all photographs presented in this paper are artificial
17 intelligence-generated.
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22 221 Aware that discussing HIV, even voluntarily, could be emotionally challenging for
23 participants, the researcher offered essential HIV support helplines and prepared a distress
24 management protocol based on Dempsey et al. (2016). Moreover, participants were contacted
25 two and four weeks after interviews to check for distress, using a follow-up care protocol
26 adapted from Sque et al. (2014).
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33 227 We acknowledge the tension between visibility and vulnerability within the socio-
34 cultural context of FMLWH. Our study emphasises how FMLWH exercise agency in
35 creating supportive online spaces and managing their identities. By carefully attending to
36 language and representation, this research hopes to contribute to destigmatisation, offering
37 counteracting narratives and promoting a more nuanced understanding of the FMLWH
38 community.
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45 233 **Research Design**
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48 234 We implemented an exploratory sequential mixed-methods design, analysing digital
49 trace data through both qualitative and quantitative methods, and then expanded upon this
50 with a qualitative case study. Following Creswell and Plano Clark (2011), this mixed-
51 methods design allowed insights from the initial qualitative phase to shape the subsequent
52 quantitative phase. This approach was particularly suitable for this study, as qualitative
53 methods were necessary to explore visibility management, while quantitative techniques were
54 required to map the network structure. Practically, identifying relevant accounts and
55 analysing their connections necessitated a prior understanding of how these individuals
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242 presented their identities as FMLWH on Twitter. To further explore the findings, a qualitative
243 case study was conducted, employing trace interviews with select Twitter users.

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245 Sample

246 The study identified 1,447 Twitter users who met the inclusion criteria, such as
247 having a publicly accessible account, having posted at least one tweet, and showing
248 indications of being FMLWH in their account. Filipino users were identified either through
249 an explicit statement of Filipino nationality in their bio or the presence of at least one tweet
250 written in Filipino or a combination of Filipino and English, as determined by Google CLD2
251 and Twitter's language detection algorithm. A series of systematic search queries
252 incorporating 84 HIV-related keywords and 170 masculinity-oriented keywords were
253 conducted using both R and Twitter's advanced search function to find Twitter accounts
254 showing indications of being owned by FMLWH. Subsequently, two rounds of manual
255 verification ensured that all candidate users employed identifiers in the intended context and
256 in reference to themselves. Some examples of the search terms we used include:

- For HIV status: Aluvia, CD4, PLHIV, poz, and TLD
- For masculinity: Blood brother, guy, he/him, *kuya* (Filipino for older brother), and *tito* (Filipino for uncle)

260 Potential interviewees were selected through purposive sampling, prioritising
261 accounts with the highest and lowest activity, influence, and popularity metrics (Riquelme
262 and González-Cantergiani, 2016). This resulted in a final sample of 24 interviewees: 19 of
263 the most prominent users and five of the least prominent users within the network. Table 1
264 shows pertinent participant characteristics.

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267 Table 1. Participant characteristics

ATTRIBUTE	VALUE
1. Average age	34
2. Average number of years living with HIV	7
3. Average number of years on Twitter	9
4. Average number of original tweets (21 October 2021–21 April 2022)	1,186
5. Average number of tweets per day since account creation	9
6. Average number of Twitter accounts	2
7. Average duration (hours) of Twitter use per day	5

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269 **Data Collection**

270 To address the first research question, the primary researcher lurked on a now defunct
 271 public Twitter list comprising self-identified FMLWH. Data collection commenced in April
 272 2020 and continued until April 2022, when theoretical saturation was reached. Fieldnotes
 273 were written to catalogue textual indicators of masculinity and HIV status. To supplement
 274 online trace data, trace interviews were conducted with 24 participants, via Zoom. These
 275 interviews, following the framework of Latzko-Toth et al. (2017: 203), involved user
 276 reflection on their own traces within Twitter, including their tweets, profiles, and activity
 277 metrics.

278 For the second research question, Twitter data from the 1,447 identified accounts
 279 were unobtrusively collected using the R package *rtweet* (Kearney, 2019). Specifically, each
 280 user's Twitter bio, account details, and up to 3,200 of the most recent tweets posted, as
 281 permitted by Twitter's application programming interface, were extracted. A total of 287,554
 282 original tweets were harvested from the 1,447 accounts. To create a more manageable corpus
 283 for analysis, the dataset was refined to 1,516 tweets and 171 Twitter profiles, representing the
 284 Twitter data of 171 account owners who had provided informed consent for the study.

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286 **Data Analysis**

287 Qualitative data such as fieldnotes, transcripts, and Twitter content were analysed
 288 using Braun and Clarke's (2022) reflexive thematic analysis framework. This involved
 289 multiple readings of textual data, coding, and iterative development and refinement of
 290 themes. Focusing on visibility management practices, the primary researcher generated
 291 descriptive, process, and structural codes (Saldaña, 2016) through close reading of a sample

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3 292 of textual data. As the analysis unfolded, regular meetings with the other authors were
4 conducted to discuss and refine emerging themes. Following the approach taken by Talbot et
5 al. (2020), the primary researcher formed an advisory team comprising three active FMLWH
6 on Twitter who were not included in the study sample. This team validated the emerging
7 interpretive framework to ensure its alignment with their personal experiences on Twitter.
8 Member checking was also done with the study participants to confirm the interpretation of
9 findings.
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16 299 Harvested online trace data were pre-processed by removing followers and friends not
17 300 part of the pseudo-population, duplicate tweets, and tweets written in languages other than
18 301 English or Filipino. The primary researcher used the processed datasets to identify follower–
19 302 friend connections within the pseudo-population. Social network analysis was subsequently
20 303 conducted using Gephi to generate network-level metrics.
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28 305 **FINDINGS**
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31 306 Our presentation of findings unfolds in two sections. Firstly, we explore visibility
32 307 management strategies, focusing on how FMLWH enact HIV disclosure on the platform.
33 308 Subsequently, we present the network structure of this user base on Twitter.
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39 310 **Visibility Management on Twitter**
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42 311 We describe three key themes surrounding the visibility management practices of
43 312 Twitter users identifying as FMLWH: 1) negotiating HIV disclosure through succinct
44 313 identifiers; 2) maintaining pseudonymous identities; and 3) shifting from partial to greater
45 314 visibility within the community of FMLWH.
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52 316 **Using Succinct HIV Identifiers**
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55 317 Conveying HIV status through succinct labels emerged as a prominent strategy within
56 318 the presencing practices of these Twitter users. We categorised these labels into three types:
57 319 1) clinical details; 2) biomarkers; and 3) social identifiers. Clinical details commonly
58 320 included users' highly active antiretroviral therapy (HAART) regimen and treatment hub. For
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3 321 example, the acronyms 'TLD' and 'LTE' appeared numerous times in Twitter bios. As
4 322 clarified by Fred, a study participant, 'TLD' is a triple drug combination that stands for
5 323 'tenofovir disoproxil, lamivudine, and dolutegravir,' while 'LTE' refers to 'efavirenz,
6 324 lamivudine, and tenofovir.' Some users, for practical reasons, indicated their HAART in their
7 325 Twitter bio to assist other PLWH who might need to borrow medication if the need arose. In
8 326 Figure 1, a sample tweet crowdsourcing for medication is presented.
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22 330 Carl recounts that during the pandemic, the Philippine government recommended that
23 331 LTE users transition to TLD, a superior HAART regimen. However, lockdowns presented
24 332 challenges for many PLWH accessing treatment hubs. Twitter facilitated the rapid exchange
25 333 of information for these individuals, as it was on this platform that Carl discovered he could
26 334 obtain a prescription via teleconsultation and have his medication delivered to his home. This
27 335 case highlights the value of circulating these identifiers within their network to exchange peer
28 336 support.
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35 337 It was also common for these users to disclose HIV treatment hubs in shorthand.
36 338 Among them, 'MMC' was frequently recorded; Fred explains that this stands for 'Makati
37 339 Medical Center,' his treatment hub in Metro Manila. This practice enabled them to connect
38 340 with other PLWH enrolled in the same healthcare facility. This finding stands out considering
39 341 the culture of avoidance within HIV treatment hubs described by participants. "Even if we
40 342 happen to run into one another for laboratory tests or medicine refills, we really don't talk,"
41 343 Brad observes. He attributes these evasive behaviours to the stigmas associated with HIV,
42 344 prompting individuals to maintain a discreet presence in settings where they could be
43 345 potentially identified as PLWH. Although Brad is now personally acquainted with some
44 346 patients in his treatment hub, he acknowledges that he first connected with them through
45 347 Twitter.
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55 348 Additionally, account owners used biomarkers to disclose their HIV status. HIV
56 349 attacks the human body by targeting CD4 or white blood cells; a CD4 count below 200
57 350 cells/ μ L indicates AIDS. The goal of HAART is to improve CD4 counts and reduce viral
58 351 load (Gill et al., 2002). "CD4 numbers are important for us," explains Gio, whose initial CD4

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3 352 count was only 16. “It took me about two years to raise my CD4 to 200. Then I ended up
4 with 700. So if I was able to do it, so can you.” Like Gio, many Twitter users listed their CD4
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6 354 count as a series of values, typically showing a progression: 16 → 200 → 700.
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9 355 Moreover, these Twitter users related to their HIV status as a social identity. Some
10 356 used straightforward keywords such as ‘HIV+’ and ‘PLHIV’ (person living with HIV). Other
11 357 users employed slang terms such as ‘blood brother’ (a term of endearment for FMLWH),
12 358 ‘octopus’ (a play on the word ‘positive’), and ‘pusit’ (the Filipino term for squid, also a play
13 359 on the word ‘positive’) to discreetly signal their HIV status. Noah observed that PLWH on
14 360 Twitter commonly labelled themselves ‘poz,’ prompting him to do the same. The arithmetic
15 361 plus sign (+), which frequently appears in Twitter names, serves as a clear indicator of HIV
16 362 status for Kyle. He remarks: “If I see the plus sign, the plus symbol, okay, that’s one major
17 363 indicator.”
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20 364 Similar to Philpot et al. (2022), this study found that public posts showcasing HAART
21 365 without context held significant meaning for PLWH but might be less meaningful to
22 366 outsiders. Interestingly, our analysis showed that several terms were commonly used in
23 367 contexts unrelated to HIV. Some examples include ‘LTE,’ an HIV drug mentioned earlier,
24 368 which could also refer to ‘long-term evolution’ in the context of wireless data transmission;
25 369 and ‘VL,’ which could stand for either ‘viral load’ or ‘vacation leave.’ Furthermore, the use
26 370 of implicit HIV social identifiers, such as ‘squid’ and ‘octopus,’ including their
27 371 corresponding emojis (□ and 🐙), may have served as ‘metaphorical identity talk’ (Davis and
28 372 Flowers, 2014) alluding to users’ HIV status (see Figure 2).
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45 374 INSERT FIGURE 2

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50 376 **Practicing Pseudonymity**

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52 377 Most of the participants had not publicly come out as PLWH on Twitter so a common
53 presencing strategy was to employ nicknames (e.g., ‘Keyser So Slay’) or personal
54 378 descriptions (e.g., ‘poz athlete’) as their unique identities on Twitter. Froomkin (1995)
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56 379 describes this online practice as untraceable pseudonymity, wherein digital personas are
57 380 maintained over time without making creators identifiable. Despite their reluctance to reveal
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3 382 their 'real' identities, FMLWH typically presented complete Twitter profiles, including a bio,
4 a profile image, and a header image. Notably, many profile images featured photos of
5 themselves with their heads cropped out or their faces covered by emoji stickers. Figure 3
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7 385 presents a sample Twitter profile.
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13 387 **INSERT FIGURE 3**
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18 389 A remarkable observation within this user base was the adherence to a similar format
19 in Twitter bios. Fred admits that he simply imitated others: "I was strictly following only the
20 poz accounts before. I also saw that's what they had in their bio, so I thought, 'all right, I'll
21 copy it too.'" For Diego, including HIV identifiers in one's Twitter bio was a way to signal to
22 other PLWH users that they belong to the same community: "I only picked it up from them
23 that, ah, this is what's nice to have on a Twitter account for easier recognition by other blood
24 brothers or sisters."
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27 396 On average, these users managed two Twitter accounts: a 'legitimate' account and an
28 'alter poz' account specifically for connecting with other PLWH on the platform, as shared
29 by Kyle. Stigmas surrounding HIV motivated users to create a secondary Twitter account.
30 Jairo elaborates: "There is still this kind of thinking in the Philippine context that having HIV
31 is something that you should be ashamed of, in a sense, that you won't go around
32 broadcasting it to everyone." For this reason, his 'alter poz' account allows him to interact
33 with other PLWH cautiously, without compromising his 'real' identity.
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39 404 ***Shifting Toward Greater Visibility***
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42 405 Although the use of succinct identifiers and pseudonymity reflected overall minimal
43 visibility in Twitter's public spaces, participants gradually increased their self-disclosure as
44 trust developed through multiple interactions, leading to deeper engagement in direct
45 messages and, eventually, in-person encounters with other PLWH. A common practice
46 involved welcoming newly diagnosed individuals through public tweets where a designated
47 ambassador from the community would tag them (see Figure 4).
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414 This practice not only provided emotional support but also facilitated the expansion of
415 social networks by connecting new users with other members of the PLWH community on
416 Twitter. Ben believes that providing a friendly welcome to newcomers is a solid first step in
417 connecting them with other PLWH. To further facilitate this process, he initiated a group chat
418 dedicated to PLWH on the Telegram app, with designated peers serving as administrators.
419 This ‘extension of Twitter,’ as Ben describes it, has created a safe space for users to share
420 more intimate details about themselves.

421 Crowdsourcing for emergency HIV medication also exemplifies the need for
422 increased visibility within the community. When PLWH find themselves in need of
423 medication while traveling to Siargao, an island in southern Philippines, Sandro is known as
424 the go-to person. This typically involves initial exchanges over Twitter direct messages,
425 which often lead to in-person meetups, demonstrating a gradual transition from minimal to
426 full visibility. Like Sandro, Nick often receives direct messages from Twitter users seeking
427 peer support, some with no indications of a positive HIV status in their profile: "We'll chat in
428 a private message and then they'll suddenly say, 'ah, I'm also part of the community' or 'I'm
429 also a blood sib.' So, first of all, of course, you need to protect the identity of that person, you
430 can't disclose it [to others]."

431 In-person get-togethers are also occasionally organised within this Twitter
432 community. Participants identified Vic as the lead organiser of out-of-town getaways
433 exclusively for PLWH. These events were often announced with great fanfare, including
434 publicity materials, online registration, and raffle draws. Gio, one of the participants, shared
435 his experience attending one of these trips, which brought together approximately 50
436 individuals. He reminisces: “It was fun to see a lot of the poz people [from] different walks of
437 life and shapes and sizes.”

438 These cases demonstrate why FMLWH might prefer Twitter over Facebook, the most
439 widely used social platform in the Philippines (Kemp, 2022). Participants shared that
440 engaging with Twitter allows them to disconnect from Facebook, a platform where they may
441 encounter less receptive audiences regarding HIV-related content. Nick contends that PLWH

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3 442 are more engaged on Twitter due to the prevalence of HIV-related stigmas on Facebook.
4 443 Drawing from his own experience, he recognises the persistent need to debunk HIV
5 444 misconceptions within his family, who are part of his Facebook network. Winchel
6 445 acknowledges Twitter as a safer space where he can openly share his HIV status, including
7 446 his adherence to treatment and his thriving lifestyle as a PLWH. For him, the supportive
8 447 community of PLWH on Twitter creates a sense of safety and acceptance. “It is the only
9 448 platform,” he comments, “that I can be an HIV-positive person and not be afraid of people
10 449 knowing about it.”
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20 451 **Network Structure of Twitter Users Who Identify as FMLWH**
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23 452 Following our exploration of visibility management, we now present two key findings
24 453 that emerged from our analysis of their network structure on Twitter. Firstly, despite an
25 454 expansive network size, these users were loosely interconnected. Secondly, these users
26 455 demonstrated a strong tendency to connect with fellow PLWH and were often directed to
27 456 these users through algorithmic recommendations.
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35 458 ***Aggregate Network Characteristics***
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38 459 We constructed the network of Twitter users identifying as FMLWH based on
39 460 ‘follows.’ The median number of followers (171) and friends (152) was comparable,
40 461 indicating that these users had each built a substantial network of connections within the
41 462 network. However, these figures potentially underestimate their actual network size, as the
42 463 analysis did not include accounts that did not meet inclusion criteria, including protected
43 464 accounts.
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48 465 Although the network comprises a substantial number of ‘follow’ ties (302,934), they
49 466 represent a small fraction (15%) of the total possible connections in this network of 1,447
50 467 Twitter users. Despite this low density, only 16 sources (users who have made connections
51 468 but received none), 10 sinks (users who received connections but made none), and two
52 469 isolates (users with no connections) were identified within the network.
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58 470 The network exhibited moderately low modularity (0.1450), indicating the presence
59 471 of five communities where users follow each other more frequently within their groups than

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3 472 with those outside. These communities may have overlapping memberships, suggesting that
4 473 users can belong to multiple clusters simultaneously. High reciprocity (0.6921) further
5 474 supports this notion by showing that many users follow each other back. The shared identity
6 475 among FMLWH users potentially contributes to this high level of reciprocity, as will be
7 476 discussed in the next theme.
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13 477 With a maximum distance of four nodes between any two users, this network has a
14 478 relatively short diameter. Alongside an average geodesic distance of 1.83, it highlights its
15 479 'small-world' nature (Watts and Strogatz, 1998). However, these short path lengths are
16 480 typical of online platforms and do not necessarily imply close familiarity among users.
17 481 Algorithms or shared interests may drive these connectivity patterns, which will also be
18 482 further explored in the next theme.
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24 483 Moreover, the network showed very low centralisation (0.0016), indicating a
25 484 decentralised structure where no single user or group dominated connectivity. Instead, ties
26 485 were distributed across a broad set of users. This suggests that within this network, Twitter
27 486 users identifying as FMLWH with public accounts tended to follow multiple users rather than
28 487 concentrating ties on a few central figures. Table 2 summarises relevant network
29 488 characteristics, while Figure 5 displays the connection network, with all actors
30 489 pseudonymised.
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ATTRIBUTE	VALUE
1. Number of nodes	1,447
2. Number of edges	302,934
3. Median in-degrees (followers)	171
4. Median out-degrees (friends)	152
5. Number of sources	16
6. Number of sinks	10
7. Number of isolates	2
8. Diameter	4
9. Average geodesic distance	1.8315
10. Reciprocity	0.6921
11. Density	0.1448
12. Modularity	0.1450
13. Centralisation	0.0016

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9493 INSERT FIGURE 5
494495 ***Networking with Other FMLWH on Twitter***

496 Interviews showed that algorithmic recommendations facilitated the circulation of
497 information and connections within the FMLWH community on Twitter, with many users
498 discovering other FMLWH through this mechanism rather than through word-of-mouth.
499 Encountering HIV-related content and other PLWH on their Twitter timelines prompted Carl,
500 Marcus, and Jairo to create separate accounts for engaging with the community. While
501 browsing his Twitter feed on his ‘legitimate’ account, Carl noticed that a friend had followed
502 an account that appeared to belong to a PLWH. Intrigued, he explored this user’s profile,
503 followers, and friends, leading to his discovery of the Twitterverse of PLWH. “That was
504 when I realised that we actually have a community,” Carl notes.

505 Marcus had no prior knowledge of the PLWH community on Twitter when he was
506 diagnosed in 2017. Coming across these users unexpectedly in his timeline piqued his
507 interest, leading him to establish a separate Twitter account to become part of the community.
508 After being @mentioned in a public ‘welcome’ tweet, as previously described, Marcus
509 observed a substantial increase in his followers. This motivated him to tailor his content to
510 better connect with his ‘blood brothers’ on Twitter.

511 Jairo’s eventual Twitter practices were shaped by his understanding of algorithmic
512 recommendations, as he avoided liking or reposting HIV-related content to prevent notifying
513 the followers of his original, ‘legitimate’ account. This led him to create a secondary account
514 where he could engage more freely with HIV-related content and connect with other PLWH:
515 “Maybe it’s time for me to create an account where I can freely follow, retweet,
516 communicate, and interact regarding those discussions which are still taboo.” This example
517 demonstrates Jairo’s deliberate avoidance of Twitter actions that might expose his HIV status
518 to individuals he did not intend to inform.

519 A key downside of enacting visibility on Twitter, even with pseudonymous profiles,
520 is the risk of encountering scams or catfishing attempts targeting PLWH. Ozzy has become
521 wary of blindly following users who appear to be PLWH, concerned that they may be
522 seeking information about his HIV status. He shares that some users with ‘alter poz’ accounts
523 have experienced being catfished: “When you’ve established a connection with the person

524 you're talking to, of course, you'll reveal yourself... there might be exchanges of actual
525 pictures, only for the other person to go, 'got you, you have HIV!'" Ozzy adds that these
526 individuals have ended up being ostracised by their real-world circles upon finding out about
527 their HIV status.

528 In other instances, scammers pose as PLWH to solicit funds. Gio recounts falling
529 victim to a fraudulent fundraising activity for the PLWH community. Immediately after
530 donating, Gio discovered that the user had deactivated their account. Finn also encountered
531 instances where scammers used deceased individuals' photos to solicit funds. As these
532 examples show, Twitter affords FMLWH opportunities for connecting with others and
533 exchanging social support. However, enacting visibility on Twitter, while offering benefits,
534 also presents risks, particularly given the platform's proneness to context collapse.

DISCUSSION

537 Here, we examine the findings in relation to the theory of visibility management
538 (Lasser and Tharinger, 2003), the theory of networked publics (boyd, 2011; Ito, 2008), as
539 well as other perspectives on publics within datafied spaces (Gillespie, 2014; Hartley et al.,
540 2023; Light, 2017b). We identify two key implications. Firstly, FMLWH demonstrated an
541 intentional effort to be visible on Twitter, primarily within their own community of ‘blood
542 brothers.’ Secondly, the affordances of Twitter facilitated the open disclosure of HIV status,
543 which is traditionally considered a private matter.

545 *A Desire to be Seen on Their Own Terms*

546 Lasser and Tharinger (2003: 238) argue that visibility management operates on a
547 continuum, ranging from least to most restrictive in terms of disclosure. Our findings align
548 with this premise, with FMLWH employing a range of disclosure strategies, from minimal
549 self-disclosure in public Twitter timelines to more extensive sharing in private channels and
550 in-person interactions.

551 Regarding visibility control, users primarily engaged with Twitter to connect with
552 their community, employing presencing practices that emphasised relationship building.
553 Their Twitter bios were crucial for presenting a balanced self-portrait, combining relevant

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3 554 HIV identifiers with other personal characteristics, highlighting that their identities extended
4 555 beyond their HIV status.
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7 556 Furthermore, our data show that most FMLWH embraced pseudonymous personas on
8 Twitter while a smaller proportion revealed their 'real' identities. These practices support
9 past research, highlighting the prevalence of anonymous communication among individuals
10 with stigmatised health conditions (Boudewyns et al., 2015; Rains, 2014). While illness-
11 related embarrassment and HIV-related stigmas likely drive a preference for anonymity
12 (Boudewyns et al., 2015; Rains, 2014), many users still completed their Twitter profiles,
13 albeit often choosing to use censored self-portraits. As such, these practices do not result in
14 complete anonymity, which is more prevalent in other platforms like Reddit and Tumblr
15 (Triggs et al., 2021: 7). Following Couldry (2012), these users negotiated their visibility on
16 Twitter by presencing their identities as FMLWH while revealing minimal, and often
17 unidentifiable, details about themselves, as if to affirm the presence of a 'real' person behind
18 the screen. This suggests a complex interplay between the desire for privacy and the need for
19 social connection. Our findings challenge the notion that total concealment is the typical
20 approach to managing stigmatised identities, as previous work has shown (Baider, 2010;
21 Carricaburu and Pierret, 1995; George and Lambert, 2015).
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24 571 The circulation of HIV identifiers in profile bios and tweets exemplify boyd's (2011)
25 572 affordances of scalability and searchability, facilitating user connections. Despite the
26 573 network's loose interconnectedness, the considerable median followers (171) and friends
27 574 (152), and high reciprocity (0.6921) support our finding that users form their own private
28 575 conversation pockets. This highlights the dynamic nature of visibility management on
29 576 Twitter, where individuals carefully manage HIV disclosure, beginning with limited sharing
30 577 in high-visibility spaces like timelines and Twitter Spaces, and progressing to increased self-
31 578 disclosure in low-visibility spaces such as direct messages and group chats. Future research
32 579 could focus on these 'bounded social media places,' as conceptualised by Malhotra (2024), to
33 580 gain deeper insights into the dynamics of visibility management within these low-visibility
34 581 spaces.
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37 582 However, recent platform changes since Twitter's transition to X have included
38 583 restrictions on direct messaging functionality to paid subscriptions (X, 2024). As observed by
39 584 participants during member checking, these changes have already impacted user interactions,
40 585 with a noticeable decline in interactions with fellow PLWH. This raises concerns that newly
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3 586 diagnosed people living with HIV may no longer have the same level of access to community
4 support and information.
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11 589 ***Socially Mediated Visibility***
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13 590 While traditional perspectives on HIV disclosure emphasise intimate and personal
14 disclosures (Jourard, 1971; Pearce and Sharp, 1973), the affordances of social media enable
15 open disclosure among PLWH (Philpot et al., 2022). Our work has highlighted the ways in
16 which users encounter traces of other FMLWH on Twitter, leave traces of their identities as
17 FMLWH within the platform, and limit their own activity to avoid leaving traces of
18 themselves in public Twitter spaces.
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23 596 The affordances of Twitter foster the replication of user-generated content, both in
24 terms of its substance and its format (boyd, 2011). Replicability was evident in the circulation
25 of common HIV identifiers within the Twitter network of FMLWH, as well as in the
26 adherence to established norms of profile work and pseudonymity. Further, expressions of
27 their identities are not only curated in their own profile (Hogan, 2010), but are also rendered
28 scalable through retweets and searchable via Twitter's search engine. These affordances
29 foster user connections (boyd, 2011; Treem and Leonardi, 2013), potentially explaining the
30 network's extensive 302,934 follows, linking all but two of these 'blood brothers.'
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38 604 While these findings highlight the dynamic interplay between the agency of FMLWH
39 in managing a sustained presence on Twitter and the role of platform affordances in shaping
40 user engagement, it is essential to acknowledge that socially mediated visibility grants users
41 only limited control over content archiving and access (Neumayer et al., 2021; Pearce et al.,
42 2020). Despite user freedom, algorithms can potentially expose online traces of vulnerable
43 individuals' identities without their realisation. As algorithmic recommendations also
44 facilitated connections among 'blood brothers,' this user collective exemplifies not only
45 networked publics but also 'calculated publics' (Gillespie, 2014) or 'algorithmic publics'
46 (Christin, 2020; Møller Hartley et al., 2023). While acknowledging the role of algorithms,
47 this study did not explore the 'black box' of algorithmic curation as it pertains to the
48 Twitterverse of FMLWH, whose mechanisms are exclusively known to platform developers
49 (Gillespie, 2014; Møller Hartley et al., 2023). The downside of algorithmic curation is that
50 socially mediated visibility can expose these users to risks, such as catfishing, fraud, and
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3 617 exposure. To mitigate these risks, these account owners must carefully monitor the content
4 they publish on Twitter, and regularly review their privacy settings.
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7 619 Findings also revealed the use of coded talk, which has been investigated in related
8 studies on PLWH, although outside the sphere of networked publics (Selikow, 2004; Wood
9 and Lambert, 2008). Social steganography, which involves the encryption of messages
10 accessible to multiple publics but decipherable only by those knowledgeable about the codes
11 in use and aware of the message's existence (boyd and Marwick, 2011), offers a valuable
12 conceptualisation of this practice. This visibility management strategy shows that even
13 pseudonymous account owners, when faced with context collapse, tended to tailor their
14 visibility on Twitter, primarily performing for fellow PLWH and others within the broader
15 HIV community. This technique of hiding in plain sight affords them an additional layer of
16 protection on top of their already pseudonymous persona. Liam, a research participant, neatly
17 captures this idea, stating: "If you're one of us or are very familiar with these terminologies,
18 [you] would easily get it—'okay, he's a blood brother'."
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21 631 Finally, our analysis shows that Twitter may serve as a gateway platform for newly
22 diagnosed PLWH to encounter similar others and subsequently access the support they
23 require to cope with their condition. However, Twitter may not be a platform for sustained
24 activity for individuals who have been living with HIV for longer periods. As participants
25 shared, Twitter initially allowed them to establish connections with other PLWH, but they
26 have since extended their interactions to other instant messaging apps. Additionally, a
27 number of online connections have developed into real-world friendships, indicating that
28 Twitter is not the sole platform facilitating communication among this group. This invites
29 further exploration of the evolving role of networked technologies in supporting connections
30 and interactions among stigmatised and vulnerable populations such as PLWH.
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34 642 CONCLUSIONS

35 643 Living with HIV is often undermined as an isolating experience, yet our study
36 illustrates that FMLWH form networked publics on Twitter, displaying a level of
37 connectivity and engagement that might not unfold organically in real-world settings.
38 644 Drawing on online trace data and trace interviews, this mixed-methods study explored how
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3 647 FMLWH negotiate visibility management on Twitter, enabling them to integrate into the
4 network of 'blood brothers' on the platform.
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7 649 While visibility management has traditionally been theorised in the context of
8 minority and marginalised groups, its application has primarily focused on the coming-out
9 process for individuals identifying as gay, lesbian, or bisexual (Dewaele et al., 2013, 2014;
10 Lasser and Tharinger, 2003; Song et al., 2022; Twist et al., 2017). By exploring the strategies
11 employed by FMLWH, our study not only illuminated their experiences on Twitter but also
12 provided valuable theoretical insights into the enactment of visibility management by
13 individuals facing the complex stigmas of gender identity, sexual orientation, and HIV status.
14 Overall, the study contributes to the ongoing theoretical development of socially mediated
15 visibility in a datafied world (Neumayer et al., 2021; Pearce et al., 2018), particularly
16 regarding hard-to-reach populations like PLWH.
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35 659 The theory of networked publics (boyd, 2011) provided a valuable lens for
36 understanding how platform affordances shape user participation on Twitter. However, this
37 research argues for a more critical approach when examining marginalised populations.
38 Light's (2013, 2014, 2017b) exploration of networked masculinities and pseudonymous
39 publics exemplifies this need for deeper theorisation. Furthermore, although HIV social
40 identities have been a subject of theoretical inquiry (Rintamaki, 2009), the ways in which
41 such identities are produced and managed within networked publics remain under-explored.
42 Our study shows empirical evidence that FMLWH form pseudonymous networked publics on
43 Twitter and employ genre knowledge to guide their self-presentation practices. These insights
44 pave the way for a theoretical exploration of networked HIV social identities.
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61 668 Lastly, the study offers alternate understandings of the concept of networked publics,
62 which often hews to normative perspectives. The reluctance of marginalised individuals to
63 participate in the 'real-name web' (Hogan, 2013) gives rise to pseudonymous networked
64 publics, which Light (2017b) has explored with men who have sex with men on a hook-up
65 site. This study extends its theorisation by framing pseudonymous networked publics within
66 the broader contexts of chronic illness, intersectional stigmas, and peer support. Specifically,
67 our study sheds light on how Twitter provides FMLWH a public and visible space to disclose
68 their HIV status, connect with blood brothers, and engage in conversations about HIV—
69 opportunities that may not be available in other settings. Accordingly, this user collective
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3 678 may be recast as potential networked *counterpublics*, which Renninger (2015) describes as
4 679 embodying a different set of practices, norms, and expectations of participation.
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LIMITATIONS

12 682 Our analysis was limited to publicly accessible Twitter accounts at the time of data
13 683 collection. Consequently, the findings may not fully represent the experiences of all FMLWH
14 684 on Twitter/X, or the broader PLWH population. Moreover, the analysis period was restricted
15 685 to six months, from 21 October 2021 to 21 April 2022. The ever-changing nature of
16 686 Twitter/X suggests that the data collected may not accurately represent current user
17 687 behaviour on the platform.
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23 688 It is also worth noting that the study was conducted before the rebranding of Twitter
24 689 to X in July 2023. Consequently, the study may not fully capture the evolving dynamics of
25 690 online interaction and community engagement among FMLWH on X, particularly
26 691 considering these recent changes. Further research is needed to understand how these
27 692 platform changes have affected the visibility dynamics of vulnerable users on X.
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7 **Post**
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10  **Fred**
11 @RunFreddieRun ...
12 Good evening guys. Anyone in Trinoma with extra TLD to spare?
13
14 8:18 PM · Dec 17, 2021
15
16

17   5  3  

19
20 **Notes**

21 • Trinoma is a shopping mall in Quezon City, Metro Manila while TLD is tenofovir disoproxil, lamivudine,
22 and dolutegravir, a combination drug therapy.
23 • To maintain user confidentiality, the original post is not shown, with the profile image replaced,
24 the tweet reworded, and other details changed.

26 Figure 1. Sample tweet crowdsourcing for HIV medication

27 266x167mm (300 x 300 DPI)

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← Post



LIVE LOVE LAUGH
@pozandplay

...

It's my Twitterversary which means time to celebrate my 4th year as 🐝



3:14 PM · Jan 28, 2022

8



14



Note

To maintain user confidentiality, the original post is not shown, with the profile image replaced, the tweet reworded, and other details changed.

Figure 2. Sample tweet showing coded talk

266x298mm (300 x 300 DPI)

59
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**Note**

To maintain user confidentiality, the original Twitter profile is not shown, with details changed, images replaced, and the bio reworded.

Figure 3. Sample Twitter profile

124x127mm (300 x 300 DPI)

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← **Post**

 **Radson**
@pozvocate ...

Hi everyone, let's warmly welcome our newbie blood sibs:
@powsit93
@vap3xx
@chromatonik

3:21 PM · Jun 10, 2021

 81  5  33  

Notes

- ‘Blood sibs’ is short for ‘blood siblings,’ a term of endearment when referring to other people living with HIV.
- To maintain user confidentiality, the original post is not shown, with the profile image replaced, the tweet reworded, and other details changed.

Figure 4. Sample 'welcome' tweet

266x202mm (300 x 300 DPI)

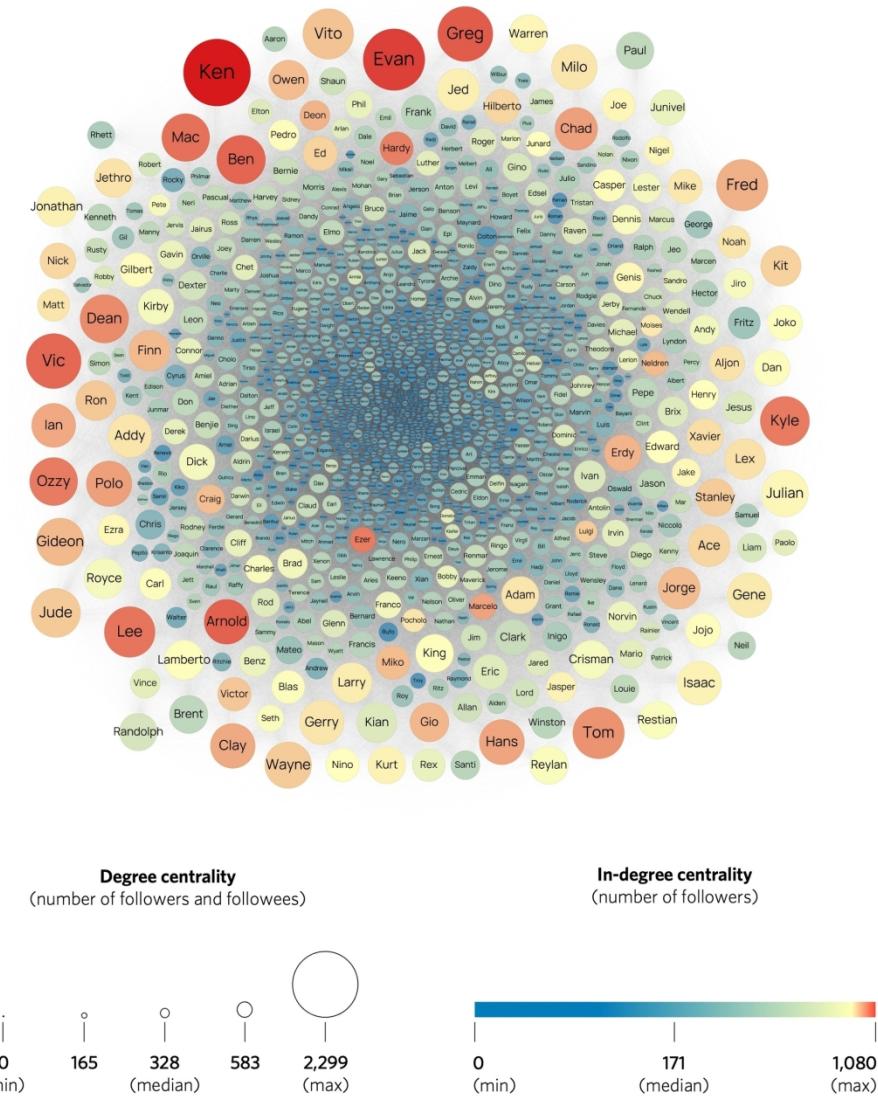


Figure 5. Connection network based on number of follows

190x219mm (300 x 300 DPI)

1
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3 28 March 2025
4
5
6 Dear Reviewer:
7
8 We are deeply grateful for your thorough review and the valuable feedback you provided. We
9 have implemented all suggested changes and revised the manuscript as follows:
10
11 ◆ The introduction has been expanded to provide a more detailed discussion of how
12 affordances facilitate visibility on social media.
13 ◆ Light's work has been integrated into the literature review.
14 ◆ Figures 1-3 have been updated with a footnote explaining that the posts have been
15 modified to protect user privacy.
16 ◆ The research design section has been clarified to better describe the sequence of
17 qualitative and quantitative studies.
18 ◆ The ethical considerations section now includes details on the support provided to
19 interviewees.
20 ◆ The discussion section has been expanded to address network metrics.
21
22
23 In reviewing the revised portions in the paper, please refer to the line numbers adjacent to the
24 text, rather than those at the page edge.
25
26
27 Thank you once again for your insightful comments.
28
29 Kind regards,
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32 The Authors
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RESPONSES TO COMMENTS OF REVIEWER 2

COMMENT	RESPONSE	PAGE
Argument in relation to digital visibility and health and its connection to the literature and the discussion		
1. How is the process enabled by platform affordances, or at least X? By answering this question, the logical connection between “Negotiating HIV Disclosure and Visibility” and “Visibility and Social Media” can be clearer. It will also likely to improve the link between the Literature Review and “Socially Mediated Visibility” part of the Discussion. It might be good to elaborate on lines 516-518 on p. 18.	We deepened the discussion of affordances in the introduction, emphasising visibility as a key social media affordance (Devito et al., 2017; Ramirez, 2018; Treem and Leonardi, 2013). We introduced Malhotra’s (2024) distinction between high-visibility and low-visibility social media spaces to better illustrate visibility management as a process and to enhance the connection to our discussion of Malhotra’s (2024) ‘bounded social media places.’	Page 5 (See lines 143–148 highlighted yellow.) Pages 5–6 (See lines 148–153 highlighted green.)
	To better connect to our findings concerning algorithmic recommendations, we also incorporated the role of algorithms in social media visibility, citing literature on algorithmic curation (Galloway and Thacker, 2007; Hartley et al., 2023; van der Nagel, 2018), 'calculated publics' (Gillespie, 2014), and 'algorithmic publics' (Christin, 2020; Hartley et al., 2023).	Page 7 (See lines 182–189 highlighted yellow.)

COMMENT	RESPONSE	PAGE
	<p>Finally, we elaborated on lines 516–518 in the previous draft:</p> <ul style="list-style-type: none"> ◆ We contextualised presencing practices within the affordance of visibility control, emphasizing users' ability to determine the visibility of their Twitter content. This context contrasts with our later discussion on algorithmic recommendations, where users have diminished control over visibility. ◆ We offered examples of how boyd's (2011) affordances of scalability and searchability manifest on Twitter, and how users transition from high- to low-visibility spaces after establishing connections. This discussion serves to further elucidate visibility management as a dynamic process. 	Page 20 (See lines 571–578 highlighted yellow.)
<p>2. What is the possibility of bringing Light (2013, 2014, 2017) also into the Literature? I am asking this question because the points of Light have been salient into the Discussion.</p>	<p>We appreciate the helpful suggestion and agree that incorporating Light's work would enhance the discussion.</p> <p>Referencing Light (2013) and Light (2017a), as well as Lohan and Faulkner (2004), we strengthened our rationale for focusing specifically on Filipino men living with HIV, rather than people living with HIV in general, given the identified research gap concerning men's digital media experiences.</p>	Page 4 (See lines 91–93 highlighted yellow.)

COMMENT	RESPONSE	PAGE
	We also cited Froomkin (1995) and Donath (1999) to reinforce the connection with pseudonymous networked publics (Light, 2014, 2017b).	<ul style="list-style-type: none"> ◆ Page 3 (See lines 76–79 highlighted yellow.) ◆ Page 13 (See lines 379–381 highlighted yellow.)
	We integrated Light (2017b) into the discussion on visibility as an affordance, linking it to Malhotra's (2024) distinction between high-visibility and low-visibility platform spaces."	Pages 5–6 (See lines 148–153 highlighted green.)
	Light's (2017b) concept of 'pseudonymous networked publics' was defined and linked to Light's (2017b) 'real-name web' and Renninger's (2015) 'counterpublic communication' to provide context for the study's conclusions.	Page 6 (See lines 169–176 highlighted yellow.)
Methods (in relation to the findings)		

COMMENT	RESPONSE	PAGE
<p>3. Can the Author/s please ensure that Figures 1-3 have no traces? Is it possible to remove other possible identifier/s (e.g., X handle or put an “xxx” to some part of the X handle to make it extra difficult for tracing)? I am asking these questions given the nature of the topic (i.e., HIV/AIDS), and its impact on those who participated.</p>	<p>In compliance with ethical research practices, and to ensure anonymity, all figures showing Twitter content were stripped of identifying information. Furthermore, heavy disguise techniques (Bruckman, 2002) and ethical fabrication procedures (Markham, 2012) were applied to prevent tracing back to account owners. While the methodology addresses these points, we acknowledge that readers may not follow the paper’s sequence and may instead focus on the images. To ensure that these ethical safeguards are consistently communicated, we have appended a footnote to each image, stating that the original post is not displayed, the profile image is replaced, the tweet is reworded, and other details are changed. Consequently, we decided against further redacting names and Twitter handles, as this would detract from the authentic look and feel of Twitter posts, which we sought to preserve.</p>	<p>Please see revised images attached to the main submission.</p>
<p>4. Based on lines 182-184 on p. 7, is it reasonable to say that the 24 interviews were conducted prior to the SNA? If YES, why not SNA first and then interviews? I am asking these questions to understand the point of reference of the stories of Fred, Carl, Brad, Gio, Kyle, Diego, Marcus, Jairo among others.</p>	<p>Thank you for this observation. We have clarified that interviews followed the social network analysis. Initially, the methodology employed an exploratory sequential mixed-methods design using only digital trace data. In the second draft, we incorporated a follow-up qualitative case study using trace interviews. We acknowledge the previous lack of clarity regarding the two qualitative studies and have revised the discussion accordingly.</p>	<ul style="list-style-type: none"> ◆ Page 7 (See lines 206–208 highlighted yellow.) ◆ Page 9 (See lines 242–243 highlighted yellow.)

COMMENT	RESPONSE	PAGE
5. What were the support available to the interviewees during/ after the interviews? For instance, were they given de-briefing or had the opportunity to avail of counseling sessions? If YES, can the Author/s declare it under the “Ethical Considerations and Researcher Reflexivity” part of the Methods. I am asking these questions as part of research ethics and informed consent (line 168 p. 6), especially in terms of beneficence.	Following ethics review recommendations, we offered relevant HIV helplines to participants after the interview. We also developed a distress protocol based on Dempsey et al. (2016) a follow-up care protocol, adapted from Sque et al. (2014), contacting participants two and four weeks post-interview. We have updated the ethical considerations section to reflect these procedures.	Page 8 (See lines 221–225 highlighted yellow.)
Objective 2 and “network structure of Twitter users who identify as FMLWH” in relation to the discussion		
6. Can the Author/s connect the network structure with “A Desire to be Seen on Their Own Terms” and “Socially Mediated Visibility”? For instance, in what ways do the findings about network structure (e.g., high reciprocity, decentralized structure) engage with the two points in the Discussion? I am asking these questions because the Discussion is silent about network structure, which is objective #2. By answering these questions, the manuscript might also help clarify this part of the Abstract “Despite an	Evidence of a considerable median number of followers and friends, and high reciprocity, in spite of the network’s loose interconnectedness, allowed us to infer that platform affordances were influential in the network’s structural formation.	Page 20 (See lines 571–578 highlighted yellow.)
	In our discussion of socially mediated visibility, we argued that platform affordances, which facilitate the circulation of HIV identifiers, likely explain the expansive network of over 300,000 follows, connecting almost all users.	Page 21 (See lines 601–603 highlighted yellow.)

COMMENT	RESPONSE	PAGE
<p>expansive network size comprising 302,934 'follow' ties, social network analysis showed that FMLWH exhibited a relatively low degree of interconnectedness within the platform. Participants expressed a strong inclination to connect with fellow 'blood brothers' and were frequently directed to these users through algorithmic recommendations rather than word-of-mouth."</p>	<p>We addressed the role of algorithms in making users visible without their knowledge. The previous draft attributed this to platform affordances. We have since expanded the discussion, supported by literature in the introduction, which explains that algorithmic curation generates 'calculated publics' (Gillespie, 2014) or 'algorithmic publics' (Christin, 2020; Hartley et al., 2023).</p>	<p>Page 21 (See lines 604–615 highlighted green.)</p>
Others		
<p>7. Please consider removing "on the other hand" without using its counterpart "on the one hand" (see lines 44 on p. 2 and 243 on p.9).</p>	<p>Thank you for catching this. We have now removed this phrase from the original statement.</p>	<ul style="list-style-type: none"> ◆ Page 3 (See line 72 highlighted yellow.) ◆ Page 11 (See lines 299–301 highlighted yellow.)

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