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Information Practices of Administrators for Controlling Information in an Online Community of New Mothers in Rural America

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**Information Practices of Administrators for Controlling
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3 **Information Practices of Administrators for**
4 **Controlling Information in an Online Community of New Mothers in Rural America**
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Abstract

Rarely does any empirical investigation show how administrators routinely control information in online communities and alleviate misinformation, hate speech, and information overload supported by profit-driven algorithms. Thematic analysis of in-depth phone interviews with members and administrators of a “Vaginal Birth After Cesarean” (VBAC) group with over 500 new mothers on Facebook shows that the administrators make 19 choices for recurring, authoritative but evolving 19 information-related activities when (a) forming the VBAC group over Facebook for local new mothers, (b) actively recruiting women who had a VBAC or have related competencies, (c) removing doctors and solicitors from the group, (d) setting up and revising guidelines for interactions in the group, (e) maintaining the focus of the group, (f) initiating distinct threads of conversations on the group, (g) tagging experts during conversations in the group, and (h) correcting misinformation. Thirty-eight information practices of the administrators indicate their nine gatekeeping roles, seven of these roles help administrators alleviate misinformation, hate speech, and information overload. Findings also show that the management of members and their interactions is a prerequisite to controlling information in online communities. Prescriptions to social networking companies and guidelines for administrators of online communities are discussed at the end.

Keywords: Information control, Network gatekeeping, Information flow, Information practices, Online communities, Facebook

Introduction

Need to control information in online communities

The uncontrollable spread of misinformation (Singh et al., 2020), hate speech (Alam et al., 2016), and resulting infodemic illustrate a global information crisis (Xie et al., 2020), which justifies the need to regularly control information on social media. Online communities can accelerate this spread of misinformation and hate speech since members of these communities, who experience homophily, social proximity, or have similar concerns, interests, or needs, are more likely to trust each other and the information shared by others in the community (Kitizie, 2017; Lu, 2007; Walther & Boyd, 2002; Wang et al., 2020).

Millions of users worldwide, especially vulnerable populations (i.e., people who are at a disadvantage, suffer from, or need help (Potnis & Gala, 2020)) increasingly rely on online health communities for informational, emotional, and social support (Chuang & Yang, 2014; Erfani et al. 2018; Introne et al., 2020; Pluye et al., 2019; Wang et al., 2015; Westbrook, 2015; Xu et al., 2018). If such users are subjected to misinformation, hate speech, or information overload, it can lead to support gaps and enhance their vulnerabilities (Chi et al., 2020; Crowley & High, 2020; Cutrona et al., 2007).

Considering the rate of creation and spreading of information on social media, algorithm-led automatic detection and prevention of misinformation or hate speech is an obvious solution to this problem (Singh et al., 2020; Wallace, 2018; Wei et al., 2016). However, algorithmic solutions are not accessible, easy to use, or affordable to vulnerable populations in online communities. Algorithms capable of controlling information flow in online communities are concealed as the strategic trade secrets of social networking companies (Heinderyckx, 2015) and profit-driven algorithms support the spread of misinformation, hate speech, and information overload on social media (Vos, 2015; Wallace, 2018).

As a result, the role of the administrators of online communities serving vulnerable populations becomes critical in controlling the flow of information in their communities.

Research question

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3 New mothers suffering from emotional, informational, economic, educational,
4 geographical, and health vulnerabilities in rural America represent one of the most vulnerable
5 populations relying on online communities for support. For instance, due to low levels of
6 education, high rates of poverty, and limited access to healthcare services and providers, women
7 from the Appalachian region are historically at risk for poorer health outcomes (Appalachian
8 Regional Commission, 2017). Tennessee, where the Appalachian Mountains cover the East part
9 of the state, ranks 9th worst in the United States for the overall health of women (US Department
10 of Health and Human Services, 2016). High cesarean delivery rates, low birth weight, infant
11 mortality, and other indicators and consequences of new mothers' poor health consistently place
12 Tennessee in the bottom ten states in the US. Hence, three healthcare providers (i.e., a doula, a
13 nurse, and a healthcare researcher) in East Tennessee formed a "Vaginal Birth After Cesarean"
14 (VBAC) group on Facebook in 2009. The mission of the VBAC group is to "provide evidence-
15 based information and education and provide support for women to heal from past birth
16 experiences and to plan for future ones," which would require low or no exposure of vulnerable,
17 new mothers to misinformation, hate speech, or information overload.
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20 Controlling the flow of information that enters from the outside of the online community
21 or is produced and shared by members of online communities is not a one-time event (Barzilai-
22 Nahon, 2009; Wallace, 2018). Hardly any study investigates the routine and non-routine
23 information-related choices and activities, collectively known as information practices
24 (Savolainen, 2008), of administrators for controlling the flow of information in their online
25 communities. Welbers and Opgenhaffen (2018) recommend investigating the norms and routines
26 of administrators of online communities to learn how they select and present information to
27 users. Hence, we investigated the following research question.
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- 30 • Which recurring and authoritative information practices of administrators of the VBAC
31 group help them control information in the group?
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34 There are several studies useful in automatically detecting and preventing the spread of
35 misinformation or hate speech on social media (Singh et al., 2020), but there is not even a single
36 empirical investigation on how the information practices of administrators help them control
37 information in an online community and can alleviate misinformation, hate speech, and
38 information overload. Our prescription to social networking companies like Facebook and
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guidance for administrators of millions of groups on Facebook could enhance the utility of their groups and benefit vulnerable populations relying on these groups for support.

The paper is organized as follows. The next section identifies three gaps in the past research on controlling information and presents “information practices” as a lens to fill in these gaps. The methodology section provides details of data collection and analysis. Findings are situated against the past research in the next section. Theoretical and practical implications along with the conclusion, limitations, and future research are discussed at the end.

Literature review

Information control

Donohue et al. (1972) conceptualize information control in terms of withholding, transmitting, shaping, manipulating, displaying, repeating, and timing information. Individuals, communities, organizations, and government agencies act as gatekeepers when they control information (Adkins & Sandy, 2020; Agada, 1999; Liu & Zhao, 2020). Drawing upon computational social science (e.g., DiMicco & Millen, 2007; Katell, 2018; Lehtiniemi & Kortessniemi, 2017), information science (e.g., Chatman, 1996; Huang et al., 2014; Hung et al., 2015; Jarrahi & Sawyer, 2015; Kitzie, 2017; Li & Slee, 2014; Sundin & Haider, 2007; Veinot, 2009; Wei et al., 2016), new media (e.g., Hemsley & Nahon, 2014; Ruckenstein & Turunen, 2020), public administration (e.g., Liu & Zhao, 2020; Maxwell, 2003), communication (e.g., Gibbs et al., 2013; Nahon, 2011), and business (e.g., Artandi, 1979; Dinev & Hart, 2005) perspectives, Table 1 lists the specific goals for controlling information and the mechanisms to achieve these goals.

Level	Goals	Mechanisms
Individual	Protecting privacy (Kitzie, 2017; Li & Slee, 2014); Parents and professionals like journalists suppressing or protecting specific information (Potnis & Tahamtan, 2021); Self-representation on social media (Huang et al., 2014)	Implicit control mechanisms (Lehtiniemi & Kortessniemi, 2017); Anonymity (Kitzie, 2017); Not divulging identifying features such as pictures or real names; Limiting other users' access to profiles and postings (DiMicco & Millen, 2007);

	<p>Conceal visible signs of illness such as HIV-AIDS, manage information about stigma (Veinot, 2009)</p> <p>Self-protection from the threats posed by outsiders (Chatman, 1996)</p> <p>Conserve limited time or energy (Hung et al., 2015); Low perceived lack of need for or the lack of utility of releasing information in social networks (Wei et al., 2016)</p> <p>Control security risks (Dinev & Hart, 2005)</p>	<p>Opting out of Electronic Health Record systems (Li & Slee, 2014)</p> <p>Hide information or lie (Goffman, 1963); Hide information from others who cannot handle it (Veinot, 2009); Self-policing, and "selective sharing" of information (Gibbs et al., 2013)</p> <p>Secrecy (e.g., deliberately not informing others) (Chatman, 1996)</p> <p>No engagement with others (Wei et al., 2016)</p> <p>Not using the Internet for online transactions (Dinev & Hart, 2005)</p>
Community	<p>Special interest groups set or control agendas in society or organizations (Artandi, 1979)</p> <p>Administrators of online communities implement network gatekeeping by (a) interacting with members in the gatekeeper's network, (b) protecting norms, information, members, and networks from outsiders, and (c)</p>	<p>Frame issues (Artandi, 1979)</p> <p>Channeling, censorship, security, adding value, infrastructure, editing content, and regulating content (Barzilai-Nahon, 2008; Hemsley & Nahon, 2014)</p>

	<p>seamlessly carrying out activities and completing tasks on the network (Barzilai-Nahon, 2008)</p> <p>Community leaders wish to comply with local policies and government laws (Nahon, 2011)</p> <p>Content moderators maintain order and safety on social media platforms (Ruckenstein & Turunen, 2020; Suzor et al., 2019)</p> <p>Administrators make knowledge more discoverable (Kazmer et al., 2014)</p> <p>Contributors to articles on Wikipedia control content for reorganizing it, exercising authority, demonstrating expertise, or removing wrong content (Sundin & Haider, 2007)</p>	<p>Community leaders share limited information (Nahon, 2011)</p> <p>Monitoring, reviewing, and deleting inappropriate content (Ruckenstein & Turunen, 2020; Suzor et al., 2019)</p> <p>Organizing knowledge using threads in online communities</p> <p>Modifying Wikipedia articles (Sundin & Haider, 2007); Editing information already broadcast on social media like WhatsApp (Zhou et al., 2018)</p>
Organization	<p>Provide patrons access to relevant information and knowledge (Potnis et al., 2018)</p> <p>Gain an economic advantage over competitors (Katell, 2018)</p>	<p>Libraries offer references services, a collection of print and digital content like e-Books, space, and access to tools such as computers and mobile devices (Yoo & Park, 2018; Potnis et al., 2017, 2018)</p> <p>Social networking companies hide algorithms (Katell, 2018)</p>

	<p>Protect the privacy of stakeholders (Jarrahi & Sawyer, 2015)</p> <p>Gain power over when, how, and with whom information can be shared in organizations to become “go-to-people,” powerful players; Avoid the potential “face-loss” costs (MacKenzie, 2004); Control the allocation and functioning of other resources in organizations (Artandi, 1979)</p> <p>Avoid information overload for website visitors (Given et al., 2013)</p> <p>Prevent the spread of hate speech and fake news (Singh et al., 2020)</p>	<p>Organizational policies and legal boundaries prevent employees from sharing work-related information on social media (Jarrahi & Sawyer, 2015)</p> <p>Employees monitor information; alienate managers from other functional areas of the same business (MacKenzie, 2004)</p> <p>Non-profits display key stories on their websites to highlight and share their success effectively (Given et al., 2013)</p> <p>Social networking companies can deploy algorithms (Singh et al., 2020)</p>
Government	National security and defense, the safety of citizens, the confidentiality of government operations, influencing policies and practices of stakeholders, framing messages, controlling, conditioning, or silencing undesired communications on the Internet,	Diplomacy, espionage, surveillance, Internet policing and censorship (e.g., deleting content from the Internet), and covert operations (Liu & Zhao, 2020; Maxwell, 2003)

	earning allies, and preserving or improving the image of the government (Liu & Zhao, 2020; Maxwell, 2003)	
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Table 1. Information Control: Goals and Mechanisms

Three gaps in the literature. Firstly, most of the literature focuses on the activities of gatekeepers for implementing information control mechanisms but rarely reveals the *decisions* that lead to these activities. For instance, information-seeking models emphasize how gatekeepers like librarians, fulfill the information needs of communities (Chatman, 1985; Oyelude & Bamigbola, 2012; Potnis et al., 2018; Yoo & Park, 2018), which is mostly about the activities of gatekeepers. In the case of online communities, the focus of this paper, administrators serve as gatekeepers by regularly seeking, avoiding, scanning, using, monitoring, and sharing information with members of their communities to channel (i.e., seeking the attention of community members and directing them in a specific direction in or outside of communities), censor (e.g., suppressing objectionable content in communities, blocking users from accessing a network), secure (e.g., managing confidentiality and integrity of information in communities), edit, or regulate (e.g., rules and procedures for controlling information) information (Barzilai-Nahon, 2009; Kwon et al., 2012; McKenzie, 2003; Riley & Manias, 2009). However, the decisions of administrators in different circumstances are seldom revealed and discussed by past research. It is important to address this gap since administrators' information-related choices can (a) decide who would benefit from the information in online communities and when, (b) influence the degree of utility of online communities in benefitting members, (c) affect the support gaps in online communities (Crowley & High, 2020), or (d) influence the "churns" of members out of online communities (Wang et al., 2020).

Computational social science relies on centrality measures for studying information control. For instance, "betweenness centrality" measures the extent to which a user lies on paths between other users in a social network and indicates the user's degree of information control in social networks (Freeman, 1978-79). The high betweenness centrality score for a user indicates that it serves as an influencer or information intermediary since most information passes through it in the network (Cho, 2019). However, none of the centrality measures are capable of

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2
3 identifying the decisions that lead to information forwarding in networks (Hansen et al., 2020).
4 Only the consequences of decisions are captured or studied by social network analysis. This is an
5 important gap to fill in since an information intermediary might not (a) use the same criteria and
6 judgment over time when identifying objectionable content on social networks for suppressing it
7 (Erfani et al., 2018) or (b) always adopt the same ways to block all unwanted members from
8 accessing the network (Mansour, 2020; Nikkhah et al., 2020).
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14 Secondly, studies focusing on the role of decisions in gatekeeping are limited to the entry
15 and movement of items (e.g., food, news) from one part of the channel to another (Bass, 1969;
16 Wallace, 2018). Hence, Shoemaker et al. (2001, p. 233) criticized that gatekeeping should not be
17 “just a series of in and out decisions,” but must instead describe the “overall process through
18 which social reality transmitted by the news media is constructed.” Shaw (2012) studied
19 interdependent user-based decision processes that build on interactions and proposed centralized
20 and decentralized decision-making in online communities, but hardly any study illustrates the
21 manifestation and consequence of gatekeepers’ decisions in terms of activities for controlling
22 information in online communities of vulnerable populations like new mothers in rural America.
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31 Thirdly, a combination of decisions and activities for controlling information in online
32 communities is an ongoing process (Wallace, 2018) but rarely does any study focuses on a
33 collection of routinized information-related habits of administrators of online communities and
34 the non-routine elements (e.g., intermittent social interactions or gatherings in the physical
35 world) of interactions between administrators and members. Hence, Savolainen (2020) advocates
36 for deconstructing information control in terms of the information practices of gatekeepers.
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41 ***Information practices: A new lens for studying information control***

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44 Information practice represents a line of research where social and contextual factors are
45 studied by researchers to understand the collective intersubjective and discursive nature of
46 interactions with information (Lloyd, 2010; Talja, 2006). Information practices are grounded in
47 the constructivist perspective (Lloyd, 2010; McKenzie, 2003; Talja, 2006) where the focus is on
48 “social practices, the concrete and situated activities of interacting people, reproduced in routine
49 social contexts across time and space” (Savolainen, 2007, p. 122). This approach is useful in
50 understanding information control as a practice that is constituted through a constellation of
51 information-related choices and activities.
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3 Practice is an activity where individuals socially engage with others (Wilson, 2009).
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5 Everyday information practice, a context-specific phenomenon, is drawn from the social
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7 phenomenology of Schutz (1964) and represents socially grounded ways of identifying, seeking,
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9 using, and sharing information available in print and electronic media including but not limited
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11 to newspapers, television, and the Internet (Savolainen, 2008; Wilson, 2009). Individuals' social
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13 world shapes and limits their choices and activities (Bourdieu, 1977). Hence, everyday
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15 information practices of individuals need to be studied in the context of structures (e.g., the
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17 virtual structure provided by social media like Facebook for interactions and social forces
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19 (Greyson, 2018) such as the interactions among members (Ruthven et al., 2018) and
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21 administrators of a group on Facebook. Rarely has any study approached and examined
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23 information control from the "information practices" perspective. This study fills in this
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25 theoretical gap.

26 **Methodology**

27 ***Data collection***

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29 After receiving approval for this study from the Institutional Review Board at our
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31 academic institute in the US, two administrators of the VBAC group announced our study on the
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33 group, which included the link to the informed consent form (see
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35 https://osf.io/k3h5t/?view_only=ba3759dd17c6457d882c2d4ba6ea5420) designed for scheduling
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37 phone interviews with us. The form requested members to enter two convenient time-slots of at
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39 least 30 minutes on weekdays of their choice, and a phone number to reach them. The form
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41 stated that there are no foreseeable risks in participating in this study other than those
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43 encountered in everyday life. It assured them of the confidentiality of their recorded phone
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45 interviews and that their information will be used for scholarly and educational purposes. We
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47 guaranteed and retained their anonymity throughout the extent of the study. The form explicitly
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49 stated that if they do not feel comfortable with the recorder, they can ask it to be turned off. All
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51 of the participants signed written consent using initials. We also reviewed the consent form with
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53 the participants before each interview and all participants provided their verbal assent to
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55 participate and be recorded as well.

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57 Within four months, we interviewed 21 out of 515 members of the VBAC group and its
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59 two administrators over the phone. Based on the information control literature presented above,
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3 we developed an interview guide (see Appendix A) for conducting in-depth interviews with each
4 interview lasting on average about 35 minutes. The longest interview lasted for about 120
5 minutes. We used Olympus WS-852 Digital Voice Recorder for recording interviews. We
6 verified the information provided by the two administrators using the experiences and opinions
7 of the group members, and vice-a-versa.
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12 We used oTranscribe, a free software application, to transcribe interviews. All the 23
13 transcripts had 171 pages 5,243 lines and 70,944 words. To retain the anonymity of participants,
14 we assigned them pseudonyms and de-identified all transcripts to ensure participant
15 confidentiality. As per our data management plan, we stored all data securely in a password-
16 protected account. Sample de-identified interview transcripts can be found at:

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20 https://osf.io/k3h5t/?view_only=ba3759dd17c6457d882c2d4ba6ea5420.

21 22 23 ***Data analysis***

24
25 We adopted the thematic analysis approach developed by Ritchie & Lewis (2003) and
26 used in several recent studies (Adkins & Sandy, 2020; Erfani et al., 2016; Vaismoradi et al.,
27 2013) for analyzing interview transcripts. Key stages involved: (1) familiarization with data, (2)
28 generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming
29 themes, and (6) producing the final analysis (Nowell et al., 2017).
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35 In the first stage, both authors reviewed interview transcripts for over a month. We
36 documented theoretical and reflective thoughts in an Excel spreadsheet. We created profiles of
37 all participants, which included details such as the number of kids each participant reported, the
38 duration of participants in the VBAC group, their experience of using Facebook, and their
39 primary activities in the group. We thought about potential codes and themes. We kept records of
40 all data field notes, transcripts, and reflexive journals. In the second stage, based on the quotes of
41 participants, we generated initial codes that helped us identify information-related choices and
42 information-related activities of the participants. In the third stage, the linkage between
43 information-related activities with information-related choices of participants helped us propose
44 themes in the form of information control mechanisms. We observed that a single information-
45 related choice was implemented through multiple activities. In the fifth stage, we built a
46 consensus on themes. Appendix B presents the second and third stages of data analysis.
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In the fourth stage, we revisited our codes and tested them for referential adequacy by returning to interview transcripts. The same stories and experiences shared by different participants helped us identify and confirm how recurring, authoritative but evolving information practices of the VBAC group administrators (VGAs) helped them control information in the group. We made sure that the information practices identified in this study are the results of the “saturation of data” shared by the interviewees. We confirmed that each theme is saturated and is well represented by many instances in the data (Chengalur-Smith et al., 2021). Our in-depth interviews with administrators of the VBAC group confirmed their common information practices. We have documented the theme naming process. In the sixth stage, we described the process of coding and analysis in sufficient detail. We ensured to have thick descriptions of context. We periodically discussed the reasons for our theoretical, methodological, and analytical choices throughout the study.

Table 2 and Table 3 summarize 19 information-related choices and corresponding 19 information-related activities, which collectively represent 38 information practices of the VGAs. The number of interviewees (i.e., n), who mentioned the information-related choices and information-related activities for implementing the information control mechanisms (i.e., A through H) listed in Table 2 and Table 3, is as follows: A (n = 12), B (n = 6), C (n = 4), D (n = 8), E (n = 15), F (n = 12), G (n = 7), and H (n = 11).

#	Information Control Mechanism	Information-Related Choices
A	Forming the VBAC group over Facebook for local, new mothers	1. Who can access and contribute to the information on the group? 2. How will members of the group meet? [online and offline] 3. What are the prerequisites for accessing and using information? [Members capable of accessing and using the features of Facebook can seek, search, and share information]
B	Actively recruiting women who had a VBAC	4. Who must be part of the group?

	or have related competencies	5. Which information must be shared in the group? [Experiential guidance by mothers]
C	Removing doctors and solicitors from the group	6. Who cannot access and contribute to the conversations in the group? [New mothers as the primary member]
D	Setting up and revising guidelines for interactions in the group	7. How should group members interact and share information? [By following the guidelines; Without any negativity and judgment]
E	Maintaining the focus of the group	8. What are the characteristics of information that can be shared with the group? [Relevant, scientific information] 9. What constitutes irregularity in member interactions and information sharing in the group? 10. When and how to intervene?
F	Initiating distinct threads of conversations in the group	11. When can group members share information on which topics? [Feeds created by Facebook algorithms help the group administrators control who will see what information at what time] 12. How can members meet information needs by easily locating all the necessary information in the group?
G	Tagging experts during conversations in the group	13. Who would have the expert information sought by members? 14. Who should be encouraged to share information?
H	Correcting misinformation	15. Which information needs to be deleted or corrected? 16. How to correct wrong information? 17. Which questions to answer? 18. When to answer questions? 19. How to answer questions? [Type of information: Scientific; and Mode: Facebook instant messenger, phone calls to members, creating a thread on the group]

Table 2. Information-related choices by VGAs

#	Information Control Mechanism	Information-Related Activities
A	Forming the VBAC group over Facebook for local, new mothers	<ol style="list-style-type: none"> 1. Choosing Facebook as an online location for social networking 2. Setting up and labeling the group under the brand name VBAC for disseminating information 3. Meeting at local, offline locations
B	Actively recruiting women who had a VBAC or have related competencies	<ol style="list-style-type: none"> 4. Identifying information seekers and resources (e.g., new mothers, experts) 5. Inviting new mothers to join the group/facilitating access to them
C	Removing doctors and solicitors from the group	<ol style="list-style-type: none"> 6. Creating a page on the Facebook group for requesting doctors to leave the group 7. Searching for profiles of doctors to remove them from the group 8. Verifying that women interested in joining the group are new mothers and not just health care professionals in the area
D	Setting up and revising guidelines for interactions in the group	<ol style="list-style-type: none"> 9. Identifying and establishing policies, rules, and regulations for communicating in the group 10. Revising the guidelines in response to the group dynamics
E	Maintaining the focus of the group	<ol style="list-style-type: none"> 11. Actively monitoring information sharing among group members 12. Discouraging or suppressing off-topic conversations, advertisements, judgmental opinions, and negative language and tone in the group 13. Timely intervention for identifying and resolving distractions and conflicts in the group
F	Initiating distinct threads of conversations in the group	<ol style="list-style-type: none"> 14. Creating opportunities for members to share information 15. Organizing information, including answers, on the group

G	Tagging experts during conversations in the group	16. Maintaining records of experts in the group 17. Invoking experts in the group to participate in conversations where their expertise is needed
H	Correcting misinformation	18. Promptly correcting wrong information posted on the group using accurate, current, and relevant information 19. Serving as a source of scientific information for members

Table 3. Information-related activities of VGAs

Table 2 and Table 3 fill in the gaps in the information control literature discussed above.

Findings and discussion

All members and administrators who participated in this study were in the range of 24 and 48 years and had at least one child born through the cesarean method. They were part of the VBAC group for at least a year when this study was conducted. Information practices of VGAs helped them implement the following eight information control mechanisms.

A. Forming the VBAC group over Facebook for local, new mothers

Information practices of individuals are driven by their intention (Budd, 2005). Since Kelly and Erica, which represent the pseudo names used for VGAs, wanted to build a local community of new mothers in East Tennessee, they decided to leverage the benefits of social media for attracting and connecting with potential members.

To form the VBAC group, Kelly and Erica selected Facebook as a social networking site. Channel type makes a difference in the ability of administrators to share, manage, and use information. For instance, features of Facebook enable members to share private or public messages, like comments, tag photos, and posts, and distribute posts across multiple platforms (Erfani et al., 2017). If Kelly and Erica had selected WhatsApp, PBworks, Google Docs, or Microsoft Teams with different sets of features than Facebook, it could have required them to use different practices for controlling the flow of information in their group. Kelly said: “I decided to go with it [Facebook] because I prefer it over, phone calls, and email. Because we can reach everyone in the group, as opposed to me answering 20 emails or phone calls, and it is pretty common with ICAN but not everybody does it.” Populating the VBAC group with new mothers who need and/or can provide support and guidance to other new mothers was the next step.

B. Actively recruiting women who had a VBAC or have related competencies

To grow the VBAC group and enhance its utility for new mothers, it was essential to recruit members who could offer experiential or expert guidance to other mothers in the VBAC group. Hence, Kelly and Erica identified and invited active members of support groups for women in their local area to join the VBAC group. Women with diverse backgrounds, skills, and experience at the intersection of social work and healthcare for women were invited to join the VBAC group. They actively recruited mothers who had a VBAC. Ruth said: “I had been going to ICAN meetings since I had moved here seven years ago. And Kelly was a doula. I was a postpartum nurse and lactation counselor. So I wanted to get hooked in with that community because I consider myself a birth advocate, and um then Kelly and I became friends. So, when she started the online group, she invited me [sic].” May also shared a similar experience: “Kelly invited and added me to the group.” It was equally important to remove members who could threaten the mission of the VBAC group or discourage new mothers from sharing their struggles or seeking help.

C. Removing doctors and solicitors from the group

Gatekeepers work as selectors for the group (Shoemaker, 1991) by limiting the group membership to mothers and prohibiting doctors and other healthcare providers from accessing the group. In the beginning, Kelly and Erica invited everybody interested in and related to offering support to new mothers in East Tennessee to join the group.

Soon after forming the VBAC group, administrators started receiving complaints from the members who did not feel safe sharing their bad experiences with local physicians since there were several local healthcare providers in the group. At about the same time, the national-level Facebook group dedicated to helping new mothers advised the VGAs to let go of providers so that their patients feel safe sharing their stories and seeking advice. Hence, administrators decided to ask the healthcare providers to leave the group by posting an announcement on the group, which shows their evolving but habituated practice in the group (McLaughlin & Vitak, 2011; Savolainen, 2020; Sundin & Haider, 2007; Uski & Lampinen, 2016). Administrators also actively tracked and removed healthcare providers who did not leave. Thus, administrators identified and expanded their core audience to create value for them.

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3 Several members appreciated administrators for actively removing doctors and other
4 solicitors to restrict group membership mostly to new mothers, the core beneficiaries of the
5 group. Jenn said: “I think it was really good that they did not allow people in the group who were
6 not seeking or adding to information. They didn't want people advertising their birth services or
7 birth photography. They kept it a small, tight, intentional group where, um, people could get
8 information about VBACs and not get spammed by people who are likely to use them for birth
9 photography” (Mansour, 2020).

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12 The misalignment between the motivations of network administrators and community
13 members can create one of the biggest hurdles to benefitting members (Coddington & Holton,
14 2014; Jenkins et al., 2018). In this case, the alignment between the interest of members and the
15 vision of the administrators helped this group grow to over 500 members in East Tennessee.

16 17 18 ***D. Setting up and revising guidelines for interactions in the group***

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21 As part of the active management, group administrators established communication
22 norms based on theory and practice. For instance, they sought professional guidance for
23 establishing information policies, rules, and regulations for communicating in the group
24 (Mansour, 2020; McLaughlin & Vitak, 2011; Uski & Lampinen, 2016). For example, Kelly said:
25 “Well I have been to therapy forever. Actually, I have had some help from the Psychology
26 department. They had some printout handouts, of effective communication and listening tools.
27 So, I used those, and ICAN chapter leader training had some more. And, of course, on the
28 Internet [sic].”

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31 While explaining the process of creating guidelines, Kelly claimed: “I did set some pretty
32 firm ground rules that we are here to listen. Listening is very key. I established some significant
33 ground rules about listening and communication so that there is no competition or trauma. In the
34 beginning, I posted articles on how to listen and communicate. That was key in the beginning,
35 but I have to say that, the legacy members, the admins, myself, if we saw posts going in the
36 wrong direction, it just took very gentle guidance to get it back on the right track.” Several
37 respondents shared with us that the presentation of the guidelines did not feel abrasive or
38 aggressive and was easily accessible, which is unlike several other groups on Facebook
39 (Mansour, 2020; Uski & Lampinen, 2016).

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3 Immediately after joining the group, new members are introduced to the guidelines. Also,
4 communication rules and guidelines are reminded through multiple posts. Haley shared her
5 experience: "Gatekeepers institutionalized the norms of communication on the VBAC group in a
6 post welcoming new member, in a pinned post, or through a group information section. That is
7 generally the three places I would look for that." Marge also reported: "Well, normally under the
8 info tab they kind of have like, you know, the rules and sometimes they will have different links
9 and attachments and things like that that can be helpful." Opinions of vulnerable populations are
10 often suppressed or ignored on social media (Ruokolainen & Widen, 2020) but the above rules of
11 communication explicitly ask members to respect different opinions and how they react to the
12 opinions. Communication guidelines serve as the lighthouse for group communication.
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21 Several of these rules and regulations were added and adapted since the inception of the
22 group, which shows evolving but structured information practices of the administrators for
23 creating value for members. Mansour (2020) investigated the role of shared information
24 practices of twenty mothers in forming and sustaining an online community on a Facebook group
25 and found that continuously erupted, unmanageable conflicts among group administrators and
26 members forced group administrators to change the norms and rules of communication on the
27 group. In contrast, administrators of the VBAC group proactively, periodically modify the
28 communication guidelines based on their observations of the communications among group
29 members.
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37 ***E. Maintaining the focus of the group***

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39 Administrators constantly monitor information shared by members via posts and
40 conversations in the group to maintain the focus of the group. Natalie said: "Admins keep it
41 pretty specific to VBACs and Cesareans information... They are really focused on the topic, and
42 if it wasn't they would nicely steer somebody, somewhere else and say well this isn't on topic,
43 we need to, we are [sic] shutting down this comment or whatever so... It works."
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48 Kelly shared the group effort of administrators to actively monitor information on the
49 group: "My co-leaders and I devised a plan for that if that one of us was out of town, or knew
50 that we had a heavy workload. We would communicate with each other and keep an eye on the
51 group, ... we haven't really had that much drama in the group, because we had the ground rules
52 but there was always somebody keeping an eye on things [sic]. We keep a close watch on the
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3 group every day. I feel like when we are more active, people probably feel less inhibited about
4 sharing.” In support, Erica said: “Admins have seen other groups go haywire [laughter]...And
5 they kind of get what we would consider “out of control.” We as admins just didn’t want that to
6 happen to our group. So we wanted to kind of set up a space that was, you know, people
7 wouldn’t jump on we call it piling it on and start bad mouthing people and make people feel bad.
8 And so it was just something we were very cognizant about from the very beginning, and so I
9 think it was seeing and did not want it to happen in our group like it was happening in others
10 [sic]. Kind of been... it is admin heavy, no doubt. We don’t have many admins but we all check
11 every single post out. We try and just watch them because they can just get out of control
12 quickly.” On average, there are about 200 active members and 70 posts a year on the group.

21 Administrators’ practice of controlling information flow in the group could have a set of
22 negative consequences for the group (Mansour, 2020; McLaughlin & Vitak, 2011; Uski &
23 Lampinen, 2016) but the evidence suggests otherwise, which demonstrates the character,
24 attitude, and intention of the administrators. They are mainly interested in controlling the group
25 for the benefit of the group. For instance, Ciara said: "I hadn't thought about that, I don't know
26 the behind the scenes, maybe they have a real strong admin that starts deleting things if it's
27 inappropriate. Or maybe it's just that... I mean, maybe it's just the women in the group who
28 know exactly what everyone has been through, and just keep it on point. I think the
29 disappointment of not having a vaginal birth that leads you to even trying for a VBAC in the first
30 place might be a uniting factor [sic]. And as far as ‘don't pass judgment on me,’ you know, I am
31 not going to judge you; you are not going to judge me. We all did everything we were supposed
32 to do, and it did turn out like it was supposed to." VGAs leveraged Facebook’s feature to create
33 discussion threads for facilitating the grouping of members with similar interests and organizing
34 relevant information.

45 46 ***F. Initiating distinct threads of conversations***

47 Online community administrators must think about the types of content members most
48 want and need, which best provides fodder for the conversations and activities in which such
49 groups are already invested (Coddington & Holton, 2014). Erica said: “It’s Cesarean Awareness
50 Month right now. So, I am posting something every day to engage the group. I try to be aware of
51 specific dates. So April is Cesarean Awareness Month, and I thought, hey, it would be cool if I
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3 had so many questions for every day of the month. And I just came up with that. I try to think
4 ahead for what I can do for specific months if this group is quiet. I try and to get it engaged and
5 active again [sic].” Jenn confirmed: “Erica posted ‘C-Section moms show us your pictures,’ or
6 ‘VBAC moms show us your pictures.’ You know, purposely valuing every type of experience
7 [sic].” Poppy resonated with a similar experience: “They started with just simply having women
8 tell their birth stories. So, the guidance that I kind of received at first was that you know that this
9 was a safe space to kind of tell what happened and um that you know there is...I guess the
10 guidance I received was that there was power in telling your story [sic].”

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Distinct threads create sub-groups in the VBAC group where mothers interested in specific sub-topic related to childbirth are brought together by the group administrators where mothers in similar situations can help each other better understand their situations and how they might address them (Ruthven et al., 2018). With the help of distinct threads in the group, VGAs curate the flow of information (Thorson & Wells, 2016) on the group by creating new opportunities for sharing, remixing, and reposting memories, stories, queries, and responses related to the childbirth of members.

G. Tagging experts in the group

Administrators consistently notify and invoke members and experts in the group to participate in conversations through the tagging feature on Facebook. Tagging represents personal requests made by the group administrators to members. Kelly explains her motivation for tagging members of the group: “I think as an admin we kind of know how to get things visual in the group. Whether that’s to post something that draws people in asking questions [or] to get people engaged, that’s definitely one way. We know that Facebook does change its algorithms all the time. It is sometimes hard to get your stuff up there and out front, so we try to really try and get people engaged, whether that’s asking questions [or] asking for experiences. Just so[?] can kind of keep the group active and, you know, on peoples’ radar. So, my expertise I guess would be that I understand that if you know[?] have a group that’s not very active, it’s going to fall lower, lower, lower on the priorities within Facebook’s algorithm or whatever... [laughter] So, definitely trying to keep people active is something we definitely do and just you know, [keep] people engaged. And whether that means having people try and put input in [sic] but also we try to contact people and say ‘hey’... because a lot of times, especially in this group, a support group, someone will ask a question. Someone asks for a recommendation on... whether

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3 it's a doula or a midwife or whatever [sic]. If that doesn't, you know, show up in people's feeds,
4 then they may not get recommendations. So, then we will tag people and say 'Hey! Did you guys
5 see this?', and just try and make sure it doesn't fall by the wayside."
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9 Tagging enriches conversations in the group since personal requests made by group
10 administrators increase the level of involvement and motivation for the receiver to engage in
11 group conversations (Stefanone et al., 2011). Publicly made personal requests create a sense of
12 exclusivity in the group and prompt the receiver to respond to the requests (Salmon, 1986).
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14 Courtney speaks to getting tagged: "When someone tags you in a post and says, 'Hey! can you
15 chime or can you offer this person some insights?' That's definite validation that your viewpoint
16 is respected...And that there is a level of expertise in how you express yourself as well as the
17 background that you have [sic].... Just having someone say, 'Hey, [participant] you exclusively
18 pumped for [how] long again now? What advice would you recommend for new moms over here
19 that is having to exclusively pump and what are some things that helped you out?" And I would
20 tell them products that helped and techniques that have helped me, and it might not help
21 everybody." The next section presents the theoretical and practical implications of the findings.
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30 ***H. Correcting misinformation***

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33 Accurate and timely information is of great importance for supporting the information
34 needs and decisions of vulnerable populations (Ruokolainen & Widen, 2020). Empathetic and
35 sensitive content moderators serve as "hidden custodians" when they correct misinformation on
36 social media platforms (Ruckenstein & Turunen, 2020) provided they interpret messages in the
37 context of a whole discussion thread and the history of interactions among members.
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39 Administrators can play a key role in identifying and removing false information on social
40 media. For instance, administrators strategically release information and occasionally correct
41 wrong information on social networks to differentiate themselves from others (Riley & Manias,
42 2009), thereby earning the reputation of an expert. Several social media platforms including
43 Facebook delegate the task of removing unwanted or inappropriate content to artificial
44 intelligence (AI) systems (Carmi, 2019). However, due to their limited capability to grasp
45 humor, sarcasm, or irony, they unnecessarily delete the content that is not hate speech; they are
46 also not advanced enough to detect and delete misinformation (Caplan et al., 2018; Ruckenstein
47 & Turunen, 2020). Hence, as of 2019, Facebook had hired over 15,000 employees who assess
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3 the appropriateness of the content flagged by users, using a set of algorithms and a set of criteria,
4 for interpreting the content in socio-political contexts and then deleting the “objectionable”
5 content and/or accounts (Dan et al., 2021; Ullmann & Tomalin, 2020). However, Facebook’s
6 criteria for classifying content as objectionable remain opaque, unaccountable, and poorly
7 understood (Roberts, 2018; Suzor et al., 2019).
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12 Instead of relying on Facebook’s AI systems and teams of human moderators VGAs in
13 our study proactively correct or delete posts with wrong information. Professional expertise in
14 healthcare helps VGAs protect members from misinformation, which demonstrates the need and
15 significance of expert-led interventions in content moderation. Kelly said: “If someone posts
16 wrong information, we make sure to correct or delete that information as soon as possible before
17 it is seen and used by others.” VGAs do not necessarily always inform members that their posts
18 are deleted, but occasionally illustrate to members what content is acceptable in their group and
19 why which is considered a “good practice” of content moderation (Suzor et al., 2019). Jenn
20 confirmed: “And there you know, they moderate and look at the information that’s provided and
21 can counter things and say. “That’s actually something you would want to talk to your doctor
22 about” or “Actually here is the recommendation from the college of gynecology” and you
23 know.” Administrators also gently help members find the right information by directing them to
24 appropriate sources online.
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36 Timeliness is an important way of adding value to the service offered by administrators in
37 their online communities (Kwon et al., 2012). VGAs timely provide scientific, accurate, and
38 latest information as an alternative to the wrong information. They often promptly answer
39 member queries on Facebook messenger. Cara praised the administrators: “Admins answer
40 member questions using Facebook messenger.” She had reached out to admins: “When I first
41 became pregnant with my fourth, I kind of reached out for some advice. Of what steps I might be
42 able to take next. They helped me a lot.” First-time mothers, who participated in a study by
43 Loudon et al. (2015), reported receiving conflicting information from gatekeepers, which was
44 not the case in our study.
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51 **Implications**

52 ***Contributions to network gatekeeping***

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Administrators of online communities implement network gatekeeping by controlling information in their communities (see Table 1 above). Our study dissects this relationship and empirically confirms network gatekeeping as information practices of gatekeepers. For instance, VGAs (a) create a page on the group for requesting doctors to leave the group, (b) actively search for profiles of doctors to remove them from the group, and (c) verify that women interested in joining the group are new mothers and not just health care professionals in the area. These activities represent the implementation of the censorship mechanism, a network gatekeeping mechanism proposed by Barzilai-Nahon (2008). For maintaining the focus of the group, which represents the editorial mechanism of network gatekeeping (Barzilai-Nahon, 2008), VGAs (a) actively monitor information sharing among group members, (b) discourage or suppress judgmental opinions and negative language and tone on the group, and (c) timely intervene for identifying and resolving conflicts on the group.

These findings confirm that information practices can serve as a theoretical lens for studying the network gatekeeping phenomenon, which has the following implications. There are millions of online communities focusing on social, gender, and health issues. In the future, researchers can leverage Tables 2 and 3, which illustrate network gatekeeping as information practices, to (a) study the positive and negative effects of information-related choices and activities of administrators on members and non-members of their communities and (b) investigate the role of administrators in helping members deal with local, national, or global issues such as public health emergencies (e.g., COVID-19 and Opioid crisis), MeToo movement, and related infodemic (Xie et al., 2020).

Information practices associated with gatekeeping roles and their effects. Traditional models of gatekeeping grounded in the information science literature treat gatekeepers as those who guard and preserve information of communities (Agada, 1999; Metoyer-Duran, 1993) or as agents to gather and disseminate information (Sturges, 2001). Kurtz (1968) envisioned gatekeepers as individuals who are part of multiple cultures and exchange and share information that links people from these different cultures to solve contextual problems. Gatekeepers were also seen as someone who preserves cultural ethos and values (Metoyer-Duran, 1993), with empirical studies conducted for identifying gatekeeping in ethnic minority communities and the way they exchange and share information (Tricarico, 1986).

However, none of these studies identify the information-related choices that lead to information-related activities for implementing gatekeeping roles (e.g., guards, preservers, agents). Librarians and social workers serve as information intermediaries and gateways of knowledge (Oyelude & Bamigbola, 2012), but every librarian or social worker would not make the same choices or engage in the same activities to perform their roles (Yoo & Park, 2018).

Table 4 informs network gatekeeping research by revealing how the combination of 19 information-related choices and corresponding 19 information-related activities of the administrators of the VBAC group helps them (a) implement eight information control mechanisms, and hence (b) play the following network gatekeeping roles: (1) Founder: the one who starts the group that interacts online and offline, (2) Access controller: the one who controls access to the group by removing doctors and solicitors from the group, (3) Disciplinarian: the one who disciplines the group to suppress negativity and judgment, (4) Monitor: the one who monitors irregularities in member interactions, (5) Arbitrator: the one who promptly arbitrates conflicts among members, (6) Promoter: the one who promotes experts or experienced members during member interactions, (7) Information organizer: the one who organizes information, (8) Editor: the one who edits information, including correcting misinformation, and (9) Information provider: the one who provides scientific information. Table 4 also shows that there is a Many-to-Many relationship between the information control mechanisms and network gatekeeping roles. For instance, one information control mechanism (e.g., E. Maintaining the focus of the group) can help VGAs play more than one network gatekeeping role (e.g., Monitor and Arbitrator) and one network gatekeeping role (e.g., Access Controllers) can be represented by more than one information control mechanisms (e.g., B. Actively recruit women who had a VBAC or have related competencies and C. Remove doctors and solicitors from the group).

Information practices of VGAs		Information control mechanism	Network gatekeeping role	Primarily alleviates
Information-related choices from Table 2	Information-related activities from Table 3			
1, 2, 3	1, 2, 3	A. Forming the VBAC group over Facebook for local, new mothers	Founder	-

4, 5, 6	4, 5, 6, 7, 8	B. Actively recruiting women who had a VBAC or have related competencies C. Removing doctors and solicitors from the group	Access controller	Information overload
7	9, 10	D. Setting up and revising guidelines for interactions in the group	Disciplinarian	Hate speech
8	11	E. Maintaining the focus of the group	Monitor	-
9, 10	12, 13		Arbitrator	Hate speech
11, 12	14, 15	F. Initiating distinct threads of conversations in the group	Information organizer	Information overload
13, 14	16,17	G. Tagging experts during conversations in the group	Promoter	Misinformation
15, 16	18	H. Correcting misinformation	Editor	Misinformation
17, 18, 19	19		Information provider	Misinformation

Table 4. Information practices for alleviating information overload, hate speech, and misinformation

Seven out of nine network gatekeeping roles help VGAs alleviate information overload, hate speech, or misinformation. For instance, past research shows that female administrators are 70% less likely to arbitrate conflicts or edit information in online communities compared to male administrators (Hergueux et al., 2021). Table 4 above shows that if female administrators make information-related choices #7, 9, and 10 and undertake corresponding information-related

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3 activities, then they can emerge as disciplinarians and arbitrators, which helps them reduce hate
4 speech in the group. Due to the information-related choices such as #5 and 11 in Table 2 above
5 and corresponding information-related activities in Table 3 above, VGAs serve as access
6 controllers and information organizers, which helps them alleviate information overload in the
7 group. Information-related choices # 13, 14, 15, 16, and 17 and corresponding information-
8 related activities, i.e., when VGAs promote experts in the group and edit and provide scientific
9 information, they minimize the spread of misinformation in the group. This finding is in line
10 with the past research on content moderators of online communities (e.g., Gallus & Bhatia,
11 2020). Table 4 also suggests that each network gatekeeping role (e.g., Founder, Monitor) does
12 not always alleviate information overload, hate speech, or misinformation.
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21 When VGAs play any of the first six network gatekeeping roles (i.e., founder, access
22 controller, disciplinarian, monitor, arbitrator, and promoter) they can manage members and
23 interactions, whereas the last three roles help them control information. Thus, the management
24 of members and their interactions emerges as a prerequisite to controlling information in online
25 communities. This finding is a major theoretical contribution of our study to the information
26 control literature.
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32 Due to the authority vested by Facebook, VGAs can carry out some of the activities (e.g.,
33 adding new members to the group, removing members from the group) and corresponding roles.
34 Also, technology features of Facebook (e.g., tagging and threading) enable administrators to
35 organize information in the group. Thus, technical features of social media influence the ability
36 of administrators to play the nine roles.
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41 ***Prescription to social networking companies***

42 Findings guide social networking companies like Facebook in letting someone become
43 and remain an administrator of online communities.
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- 47 1. Develop criteria for determining who is suitable to become an administrator. Sample
48 criteria could include the mission of the group, subject matter expertise of potential
49 administrators, their values, and their standards of acceptable interactions and
50 information exchanges among group members.
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2. People interested in becoming administrators can be asked to complete a short quiz that will test them using the above criteria. People who score above a cutoff score would be allowed to start or administer an online community. People who are likely to allow hate speech and/or misinformation in their groups should not be permitted to become group administrators.
3. Build a rating system for members to assess and rate the performance of their group administrators. Group administrators can be rated for various information practices implemented when playing the gatekeeping roles listed in Table 4 above.
4. The ratings of group administrators can serve as one of the indicators of the “well-being” of the group and can help people interested in joining the group to make a better-informed decision. Social networking companies can categorize groups based on the ratings of group administrators. For instance, if group administrators are rated as 1 (on a scale of 1 to 5) by members of the group, then this group can be marked as red. If group administrators are rated as 4 out of 5 by members of the group, then this group can be marked as green. Social networking companies can determine the threshold ratings of group administrators for classifying groups into red, yellow, and green categories.
5. Social networking companies can ask aspiring or current group administrators to play the roles of (a) access controller and information organizer to minimize information overload in the group, (b) disciplinarian and arbitrator to keep a check on hate speech in the group, and (c) promoter, editor, and information provider to lessen the spread of misinformation.
6. Social networking companies can inform group administrators that ways to implement any of the network gatekeeping roles would influence the degree of outcomes. Based on Table 4, companies can suggest sample information practices for implementing various gatekeeping roles.

Guidelines for administrators of online communities

In the backdrop of user “churns” in online communities (Wang et al., 2020), information practices of VGAs can guide administrators of other online communities to better interact with and retain members.

VGAs do not exhibit several information practices documented by past research on online communities. For instance, Kazmer et al. (2014) found that medical providers,

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3 researchers, and patients collectively created and distributed authoritative knowledge on the
4 PatientsLikeMe discussion forum to help members deal with neurodegenerative conditions. In
5 contrast, in response to the need and complaints of new mothers, VGAs removed doctors from
6 the group, which demonstrates a high level of primary-audience-centered information service in
7 the group. Mansour (2020) reported that rigid communication guidelines spark arguments and
8 conflicts between administrators and members of support groups on Facebook, forcing members
9 to leave the group. VGAs are not rigid about the communication rules and guidelines on the
10 group; rather the guidelines evolve to accommodate member needs and in response to situations
11 in the group. Unlike other social networks of new mothers (Loudon et al., 2015; Papen, 2013),
12 new members are not forced to introduce themselves or share personal stories. VGAs are strict in
13 enforcing the established communication guidelines, but, due to their empathetic nature, they let
14 members receive information passively, which provides a conducive environment for introverted
15 mothers to stay in and benefit from this group. Group administrators can reprimand or attack
16 members who violate communication norms or post false information on Facebook groups
17 (McLaughlin & Vitak, 2011; Uski & Lampinen, 2016). In contrast, VGAs gently guide members
18 who post wrong or irrelevant information; they delete those posts and politely warn or remind
19 members of the guidelines of posting information with scientific evidence. Withholding
20 information is a common practice among administrators of online communities (Wallace, 2018),
21 instead, VGAs promptly answer member queries and invite experts in the group to chime in.
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37 However, not all information practices of VGAs benefit new mothers. For instance, due
38 to the selection of Facebook as an online space by VGAs, new mothers in rural Appalachia, who
39 are unable to access Facebook, can be deprived of the information and support offered by the
40 group. Facebook allows users to hide their identity, which is a type of information control
41 (Kitzie, 2017) that can encourage the sharing of misinformation and attacks on the group. The
42 inability of the VBAC group members to use features of Facebook prevent them from searching
43 for information in the group. Some study participants complained to us about their inability to
44 locate information in the group when they needed it the most. Administrators of online
45 communities need to be aware of the level of technical competencies of the population they wish
46 to serve and offer training to members for using features of the social media platform upon
47 which the community is built.
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Conclusion, limitations, & future research

Study findings illustrate the utility of the “information practices” lens as a complementary approach to existing multidisciplinary perspectives, for better understanding and explaining administrators’ information control in online communities. This study contributes to the “choices-activities-mechanisms-roles-effects” linkage to study information control (see Table 4 above). We conclude that the ability of administrators to alleviate misinformation, hate speech, and information overload through information control depends on their vision (e.g., to educate and support new mothers in rural Appalachia), subject matter expertise (e.g., academic background and work experience in healthcare), values (e.g., *courage* to remove doctors from the group, *connecting* information seekers and experts, spreading *knowledge*, encouraging *diversity* of topics and viewpoints), 38 information practices (see Tables 2 and 3 above), including acceptable standards of member interactions (e.g., no fights, no attacks, no drama, no judgments) and information exchanges (e.g., intolerance for unscientific information), and the use of the group by members. We illustrate how administrators of Facebook groups can leverage the authority vested in by and technical features of Facebook, to minimize misinformation, hate speech, and information overload supported by profit-driven algorithms of Facebook for group members.

Limitations

Findings should be interpreted with caution since this study relies on a non-probabilistic, convenient sample of new mothers in the VBAC group. This study is not longitudinal. Future research would benefit from studying information practices across a long period in an online group for the following reasons. Technical features of Facebook (e.g., algorithms used by the company to detect hate speech and misinformation) keep on changing. Since some of the information practices and roles of administrators depend on the features of Facebook, some of the study findings might not be relevant in the future. For instance, in the future, if Facebook automatically starts flagging off-topic and meandering threads of conversations among group members, it could eliminate the need for some of the information practices of VGAs to maintain the focus of conversations in the group. In the future, if Facebook lets administrators quarantine group members who spread hate speech or misinformation, administrators might start implementing new information practices. Hence, longitudinal studies can help researchers track

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3 the effect of changing technical features on the evolving information practices of administrators
4 of online communities.
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6 7 ***Future research*** 8

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10 VGAs have dedicated themselves to serving members of their group for over 11 years.
11 Future research can investigate the nature of volunteer labor in online communities and its role in
12 sustaining such communities. Each social media platform has unique algorithms, frontend
13 features, and the rights provided to administrators and members of online communities. Hence, it
14 would be useful to compare and contrast the role of these unique features in shaping the
15 decisions, activities (e.g., moderating content in online forums), and roles of administrators and
16 members to alleviate misinformation, hate speech, and information overload on distinct social
17 media platforms. Future studies can also test the role of administrators' ability to alleviate
18 misinformation, hate speech, or information overload, in growing and sustaining online
19 communities.
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34 35 **References** 36

- 37 Adkins, D., & Sandy, H. (2020). Information behavior and ICT use of Latina immigrants to the
38 U.S. Midwest. *Information Processing & Management*, 57(3), 1-14.
39
40 Agada, J. (1999). Inner-city gatekeepers: An exploratory survey of their information use
41 environment. *Journal of the American Society for Information Science*, 50(1), 74-85.
42
43 Alam, I., Raina, R. L., & Siddiqui, F. (2016). Free vs hate speech on social media: The Indian
44 perspective. *Journal of Information, Communication and Ethics in Society*, 14(4), 350–
45 363.
46
47
48
49
50 Appalachian Regional Commission (2017). Appalachian region endures dramatic health
51 challenges compared with nation, new research shows. Retrieved from
52 [53 https://www.arc.gov/news/appalachian-region-endures-dramatic-health-challenges-](https://www.arc.gov/news/appalachian-region-endures-dramatic-health-challenges-compared-with-nation-new-research-shows/)
54 [55 compared-with-nation-new-research-shows/](https://www.arc.gov/news/appalachian-region-endures-dramatic-health-challenges-compared-with-nation-new-research-shows/)
56
57
58
59
60

- 1
2
3 Artandi, S. (1978). Man, information, and society: New patterns of interaction. *Journal of the*
4 *American Society for Information Science*, 30(1), 15–18.
5
6
7 Barzilai-Nahon, K. (2009). Gatekeeping: A critical review. *Annual Review of Information*
8 *Science and Technology*, 43(1), 1-79.
9
10
11 Barzilai-Nahon, K. (2008). Toward a theory of network gatekeeping: A framework for exploring
12 information control. *Journal of the American Society for Information Science and*
13 *Technology*, 59(9), 1493-1512.
14
15
16
17 Bass, A. (1969). Refining the “Gatekeeper” concept: A UN radio case study. *Journalism & Mass*
18 *Communication Quarterly*, 46(1), 69-72.
19
20
21 Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge, UK: Cambridge University
22 Press.
23
24
25 Budd, J. (2005) Phenomenology and information studies, *Journal of Documentation*, 61(1), 44-
26 59.
27
28
29 Caplan, R., Hanson, L., & Donovan, J. (2018). Dead reckoning: Navigating content moderation
30 after "fake news". Data & Society Research Institute. Retrieved from
31 <https://apo.org.au/node/134521>
32
33
34
35 Carmi, E. (2019) The hidden listeners: Regulating the line from telephone operators to content
36 moderators. *International Journal of Communication*, 13, 440-458.
37
38
39 Chatman, E. (1985). Information, mass media use, and the working poor. *Library and*
40 *Information Science Research*. 7(2), 97-113.
41
42
43 Chatman, E. (1996). The impoverished life-world of outsiders. *Journal of the American Society*
44 *for Information Science*. 47(3), 193-206.
45
46
47 Chengalur-Smith, I., Potnis, D., & Mishra, G. (2021). Developing voice-based information-
48 sharing services to bridge the information divide in marginalized communities: A study
49 of farmers using IBM’s Spoken Web in rural India. *International Journal of Information*
50 *Management*. 57(1). <https://doi.org/10.1016/j.ijinfomgt.2020.102283>.
51
52
53
54
55 Chi, Y., He, D., & Jeng, W. (2020). Laypeople's source selection in online health
56
57
58
59
60

- 1
2
3 information-seeking process. *Journal of the Association for Information Science and*
4 *Technology*, 71(12), 1484-1499.
5
6
7 Cho, T. (2019). Corporate venture capital investment of network characteristics and innovation:
8 Taiwan Semiconductor Industry. *International Journal of Organizational Innovation*,
9 11(4), 10-26.
10
11
12
13 Chuang, K., & Yang, C. (2013). Informational support exchanges using different computer-
14 mediated communication formats in a social media alcoholism community. *Journal of the*
15 *Association for Information Science and Technology*, 65(1), 37–52.
16
17
18
19 Coddington, M., & Holton, A. (2014). When the gates swing open: Examining network
20 gatekeeping in a social media setting. *Mass Communication and Society*, 17(2), 236-257.
21
22
23 Crowley, J., & High, A. (2020). Effects of provider identity and locus of supportive conversation
24 on coping with an identity-threatening stressor. *Communication Research*, 47(4),
25
26
27 Cutrona, C., Shaffer, P., Wesner, K., & Gardner, K. (2007). Optimally matching support and
28 perceived spousal sensitivity. *Journal of Family Psychology*, 21(4), 754–758.
29
30
31 Dan, V., Paris, B., Donovan, J., Hemeleers, M., Roozenbeek, J., Linden, S., & Sikorski, C.
32 (2021). Visual mis- and disinformation, social media, and democracy, *Journalism &*
33 *Mass Communication Quarterly*, 98(3), 641-664.
34
35
36
37 DiMicco, J. & Millen, D. (2007). Identity management: Multiple presentation of self in
38 Facebook. In Proceedings of the 2007 International ACM Conference on Supporting
39 Group Work (GROUP '07) (pp. 383–386). New York: ACM Press.
40
41
42
43 Dinev, T., & Hart, P. (2005). Internet privacy concerns and social awareness as determinants of
44 intention to transact. *International Journal of Electronic Commerce*, 10(2), 7–29.
45
46
47 Donohue, G., Tichenor, P., & Olien, C. (1972), *Gatekeeping: Mass Media Systems and*
48 *Information Control*, Beverly Hills, CA: Sage.
49
50
51 Erfani, S., Abedin, B., & Blount, Y. (2017). The effect of social network site use on the
52 psychological well-being of cancer patients. *Journal of the Association for Information*
53 *Science and Technology*, 68(5), 1308-1322.
54
55
56
57
58
59
60

- 1
2
3 Evans, M., Donelle, L., & Hume-Loveland, L. (2012). Social support and online postpartum
4 depression discussion groups: A content analysis. *Patient education and counseling*,
5 87(3), 405-410.
6
7
8
9
10 Freeman, L. (1978-79). Centrality in social networks conceptual clarification. *Social Networks*,
11 1(3), 215-239.
12
13
14 Gallus, J., & Bhatia, S. (2020). Gender, power and emotions in the collaborative production of
15 knowledge: A large-scale analysis of Wikipedia editor conversations. *Organizational*
16 *Behavior and Human Decision Processes*, 160, 115-130.
17
18
19
20 Gibbs, J., Rozaidi, N., & Eisenberg, J. (2013). Overcoming the “ideology of openness”: Probing
21 the affordances of social media for organizational knowledge sharing. *Journal of*
22 *Computer-Mediated Communication*, 19, 102-120.
23
24
25
26
27 Given, L., Forcier, E., & Rathi, D. (2013). Social media and community knowledge: An ideal
28 partnership for non-profit organizations. *Proceedings of the American Society for*
29 *Information Science and Technology*, 50(1), 1-11.
30
31
32
33 Goffman, E. (1963) *Stigma*. Notes on the Management of Spoiled Identity. Englewood Cliffs,
34 NJ: Prentice-Hall.
35
36
37
38 Greyson, D. (2018). Information triangulation: A complex and agentic everyday information
39 practice. *Journal of the Association for Information Science & Technology*, 69(7), 869-
40 878.
41
42
43 Hansen, D., Schneiderman, B., Smith, M., & Himelboim, I. (2020). Analyzing Social Media
44 Networks with NodeXL: Insights from a Connected World, Morgan Kauffman.
45
46
47 Heinderyckx, F. (2015). Gatekeeping theory redux, In *Gatekeeping in Transition*, T. Vos & F.
48 Heinderyckx (Eds.), New York, NY: Routledge, 253-267.
49
50
51 Hemsley, J., & Nahon, K. (2014). *Going viral*. Cambridge, UK: Polity Press.
52
53
54 Hergueux, J, Algan, Y., Benkler, Y., & Fuster-Morell, M. (2021). Do I trust this stranger?
55 Generalized trust and the governance of online communities. WWW '21 Companion,
56
57
58
59
60

1
2
3 539-543.
4

- 5 Hoskins, A., & O'Loughlin, B. (2015). Arrested war: The third phase of mediatization.
6 *Information, Communication & Society*, 18(11), 1320-1338.
7
8
9
10 Huang, H., Chu, S. K.-W., & Chen, D. Y.-T. (2014). Interactions between English-speaking and
11 Chinese-speaking users and librarians on social networking sites. *Journal of the*
12 *Association for Information Science and Technology*, 66(6), 1150-1166.
13
14
15 Hung, S.-Y., Lai, H.-M., & Chou, Y.-C. (2015). Knowledge-sharing intention in professional
16 virtual communities: A comparison between posters and lurkers. *Journal of the*
17 *Association for Information Science and Technology*, 66(12), 2494-2510.
18
19
20
21 Introne, J., Irickson, E., Semaan, B., Goggins, S. (2020). Designing sustainable online support:
22 Examining the effects of design change in 49 online health support communities. *Journal*
23 *of the Association for Information Science and Technology*, 71(4), 379-394.
24
25
26
27 Jarrahi, M., & Sawyer, S. (2014). Theorizing on the take-up of social technologies,
28 organizational policies and norms, and consultants' knowledge-sharing practices. *Journal*
29 *of the Association for Information Science and Technology*, 66(1), 162-179.
30
31
32
33 Jenkins, H., Ford, S., & Green, J. (2018). *Spreadable media: Creating value and meaning in a*
34 *networked culture*. New York, NY: NYU Press.
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
Katzmer, M., Lustria, M., Cortese, J., Burnett, G., Kim, J.-H., Ma, J., & Frost, J. (2014).
Distributed knowledge in an online patient support community: Authority and Discovery.
Journal of the Association for Information Science and Technology, 65(7), 1319-1334.
Kitzie, V. (2017). Affordances and constraints in the online identity work of LGBTQ+
individuals. *Proceedings of the Association for Information Science and Technology*,
54(1), 222-231.
Kurtz, N. (1968). Gatekeepers-agents in acculturation. *Rural Sociology*, 33(1), 64-70.
Kwon, K., Oh, O., Agrawal, M., & Rao, H. (2012). Audience gatekeeping in the Twitter service:

- 1
2
3 An investigation of tweets about the 2009 Gaza conflict. *AIS Transactions on Human-*
4 *Computer Interaction*, 4(4), 212-229.
5
6
7 Lehtiniemi, T., & Kortenesniemi, Y. (2017). Can the obstacles to privacy self-management be
8 overcome? Exploring the consent intermediary approach, *Big Data & Society*, 1-11,
9 <https://doi.org/10.1177/2053951717721935>.
10
11
12
13 Li, T., & Slee, T. (2014). The effects of information privacy concerns on Digitizing Personal
14 Health Records. *Journal of the Association for Information Science and Technology*,
15 65(8), 1541-1554.
16
17
18
19 Liu, J., & Zhao, J. (2020). More than plain text: Censorship deletion in the Chinese social media.
20 *Journal of the Association for Information Science and Technology*, 72(1), 18-31.
21
22
23 Lloyd, A. (2010). Framing information literacy as information practice: site ontology and
24 practice theory, *Journal of Documentation*, 66(2), 245-258.
25
26
27 Loudon, K., Buchanan, S., & Ruthven, I. (2015). The everyday life information seeking
28 behaviours of first-time mothers. *Journal of Documentation*, 72(1), 24-46.
29
30
31 Lu, Y. (2007). The human in human information acquisition: Understanding gatekeeping and
32 proposing new directions in scholarship, *Library & Information Science Research*, 29,
33 103-123.
34
35
36
37 Mansour, A. (2020). Shared information practices on Facebook: The formation and development
38 of a sustainable online community. *Journal of Documentation*, 76(3), 625-646.
39
40
41 MacKenzie, M. (2004). The cultural influences of information flow at work: Manager
42 information behavior documented. *Proceedings of the American Society for Information*
43 *Science and Technology*, 41(1), 184-190.
44
45
46
47 Maxwell, T. (2005). Homeland Security and information control: A model of asymmetric
48 information flows. *Proceedings of the American Society for Information Science and*
49 *Technology*, 40(1), 128-134.
50
51
52
53 McLaughlin, C., & Vitak, J. (2011). Norm evolution and violation on Facebook. *New Media &*
54 *Society*, 14(2), 299-315.
55
56
57
58
59
60

- 1
2
3 McKenzie, P. (2003). Justifying cognitive authority decisions: Discursive strategies of
4 information seekers. *The Library Quarterly: Information, Community, Policy*, 73(3),
5 261–288.
6
7
8
9 Metoyer-Duran, C. (1993). Information gatekeepers. *Annual Review of Information Science and*
10 *Technology*, 28, 111–150.
11
12
13 Nahon, K. (2011). Fuzziness of inclusion/exclusion in networks. *International Journal of*
14 *Communication*, 5, 756-772.
15
16
17 Nikkhah, S., Murillo, A., Young, A., & Miller, A. (2020). Coming to America: Iranians’ use of
18 Telegram for immigration information seeking. *Aslib Journal of Information*
19 *Management, (ahead-of-print)*.
20
21
22
23 Nowell, L., Norris, J., White, D., & Moules, N. (2017). Thematic analysis: Striving to meet the
24 trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13.
25
26
27 Oyelude, A., & Bamigbola, A. (2012). Libraries as the gate: “Ways” and “keepers” in the
28 knowledge environment. *Library Hi Tech News*, 29(8), 7-10.
29
30
31 Papan, U. (2013). Conceptualising information literacy as social practice: a study of pregnant
32 women's information practices. *Information Research: An International Electronic*
33 *Journal*, 18(2).
34
35
36
37 Pluye, P., El Sherif, R., Granikov, V., Hong, Q. N., Vedel, I., Galvao, M. C., Frati, F.,
38 Desroches, S., Repchinsky, C., Rihoux, B., Légaré, F., Burnand, B., Bujold, M., & Grad,
39 R. (2019). Health outcomes of online consumer health information: A systematic mixed
40 studies review with framework synthesis. *Journal of the Association for Information*
41 *Science and Technology*, 70(7), 643-659.
42
43
44
45
46 Potnis, D., Deosthali, K., & Pino, J. (2017). Investigating barriers to “using information” in
47 electronic resources: A study with e-book users. *Proceedings of the 80th Annual Meeting*
48 *of the Association for Information Science & Technology*, 54(1), 318-326.
49
50
51
52 Potnis, D., Deosthali, K., Zhu, X., & McCusker, R. (2018). Factors influencing undergraduate
53 use of e-books: A mixed methods study. *Library & Information Science Research*, 40(2),
54 106-117.
55
56
57
58
59
60

- 1
2
3 Potnis, D. & Gala, B. (2020). Best practices for conducting fieldwork with marginalized
4 communities. *Information Processing & Management*, 57(3), 102144.
5
6
7 Potnis, D. & Tahamtan, I. (2021). Hashtags for gatekeeping of information on social
8 media. *Journal of the Association for Information Science and Technology*, 72(10), 1234-
9 1246.
10
11
12
13 Riley, R. & Manias, E. (2009). Gatekeeping practices of nurses in operating rooms. *Social
14 Science & Medicine*, 69(2), 215-222.
15
16
17 Ritchie, J. & Lewis, J. (2003). *Qualitative research practice: A guide for social science students
18 and researchers*. Sage, Thousand Oaks: CA.
19
20
21 Roberts, S. (2018). Digital detritus: 'Error' and the logic of opacity in social media content
22 moderation. *First Monday*, 23(3), <http://dx.doi.org/10.5210/fm.v23i3.8283>.
23
24
25 Ruckenstein, M. & Turunen, L. (2020). Re-humanizing the platform: Content moderators and the
26 logic of care, *New Media & Society*, 22(6), 1026-1042.
27
28
29 Ruokolainen, H., & Widen, G. (2020). Conceptualising misinformation in the context of asylum
30 seekers. *Information Processing & Management*, 57(3), 1-14.
31
32
33
34 Ruthven, I., Buchanan, S., & Jardine, C. (2018). Relationships, environment, health and
35 development: The information needs expressed online by young first-time mothers.
36 *Journal of the Association for Information Science and Technology*, 69(8), 985-995.
37
38
39 Salmon, C. (1986). Perspectives on involvement in consumer and communication research.
40 *Progress in Communication Sciences*, 7, 243-268.
41
42
43
44 Savolainen, R. (2007). Information behaviour and information practice; reviewing the "umbrella
45 concepts" of information seeking studies. *The Library Quarterly*, 77(2), 109-32.
46
47
48 Savolainen, R. (2008). *Everyday information practices: A social phenomenological perspective*.
49 Maryland, MD: Scarecrow Press.
50
51
52 Savolainen, R. (2020), "Manifestations of expert power in gatekeeping: A conceptual study",
53 *Journal of Documentation*, 76(6), 1215-1232.
54
55
56 Schutz, A. (1964). The social world and the theory of social action. In *Collected papers II* (pp. 3-
57
58
59
60

- 1
2
3 19). Dordrecht, Netherlands: Springer.
4
5
6 Shaw, A. (2012). Centralized and decentralized gatekeeping in an open online collective. *Politics*
7 & *Society*, 40(3), 349-388.
8
9
10 Shoemaker, P. (1991). *Gatekeeping*. Thousand Oaks, CA: Sage.
11
12 Shoemaker, P., Eichholz, J., Kim, E., & Wrigley, B. (2001). Individual and routine forces in
13 gatekeeping. *Journalism & Mass Communication Quarterly*, 78(2), 233-246.
14
15
16 Singh, V., Ghosh, I., & Sonagara, D. (2020). Detecting fake news stories via multimodal
17 analysis. *Journal of the Association for Information Science and Technology*, 72(1), 3-17.
18
19
20 Stefanone, M., Kwon K., & Lackaff, D. (2011). The value of online friends: Networked
21 resources via social network sites. *First Monday* 16(2).
22
23
24 Sturges, P. (2001). Gatekeepers and other intermediaries. *Aslib Proceedings*, 53(2), 62–67.
25
26
27 Sundin, O., & Haider, J. (2008). Debating information control in web 2.0: The case of Wikipedia
28 vs. Citizendium. *Proceedings of the American Society for Information Science and*
29 *Technology*, 44(1), 1-7.
30
31
32 Suzor, N., West, S., Quodling, A., & York, J. (2019). What do we mean when we talk about
33 transparency? Toward meaningful transparency in commercial content moderation.
34 *International Journal of Communication*, 13, 1526-1543.
35
36
37
38 Talja, S. (2006). *The domain analytic approach to scholars information practices*, In Fisher,
39 K.E., Erdelez, S. and McKechnie, L. (Eds), *Theories of Information Behaviour*,
40 *Information Today*, Medford, NJ, 123-7.
41
42
43
44 Thorson, K., & Wells, C. (2016). Curated flows: A framework for mapping media exposure in
45 the digital age. *Communication Theory*, 26(3), 309-328.
46
47
48
49 Tricarico, D. (1986). Influence of the Irish on Italian communal adaptation in Greenwich
50 Village. *Journal of Ethnic Studies*, 13(4), 127–137.
51
52
53 Ullmann, S. & Tomalin, M. (2020). Quarantining online hate speech: Technical and ethical
54 perspectives. *Ethics & Information Technology*, 22, 69-80.
55
56
57
58
59
60

- 1
2
3 US Department of Health and Human Services (2016). America's Health Rankings. Retrieved
4 from <https://aspe.hhs.gov/poverty-guidelines>
5
6
7 Uski, S., & Lampinen, A. (2016). Social norms and self-presentation on social network sites:
8 profile work in action. *New Media & Society*, 18(3), 447-464.
9
10
11 Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis:
12 Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*,
13 15(3), 398-405.
14
15
16
17 Veinot, T. (2009). "A lot of people didn't have a chance to support us because we never told
18 them" stigma management, information poverty and HIV/AIDS information/HELP
19 networks. *Proceedings of the American Society for Information Science and Technology*,
20 46(1), 1-20.
21
22
23
24
25 Vos, T. (2015). Revisiting Gatekeeping Theory during a Time of Transition. In *Gatekeeping in*
26 *Transition*, T. Vos & F. Heinderyckx (Eds.), New York, NY: Routledge, 3-24.
27
28
29 Wall Street Journal (2017). Rural America's childbirth crisis: The fight to save Whitney Brown.
30 Retrieved from [https://www.wsj.com/articles/rural-americas-childbirth-crisis-the-fight-to-](https://www.wsj.com/articles/rural-americas-childbirth-crisis-the-fight-to-save-whitney-brown-1502462523)
31 [save-whitney-brown-1502462523](https://www.wsj.com/articles/rural-americas-childbirth-crisis-the-fight-to-save-whitney-brown-1502462523)
32
33
34
35 Wallace, J. (2018). Modelling contemporary gatekeeping: The rise of individuals, algorithms and
36 platforms in digital news dissemination. *Digital Journalism*, 6(3), 274-293.
37
38
39 Walther, J., & Boyd, S. (2002). Attraction to computer-mediated social support. *Communication*
40 *Technology and Society: Audience Adoption and Uses*, 153188, 50-88.
41
42
43 Wang, Xi, Zuo, Z., & Zhao, K. (2015). *The evolution and diffusion of user roles in online health*
44 *communities: A social support perspective*. 2015 International Conference on Healthcare
45 Informatics. 48-56.
46
47
48
49 Wei, J., Wang, F., & Lindell, M. (2016). The evolution of stakeholders' perceptions of disaster:
50 A model of information flow. *Journal of the Association for Information Science and*
51 *Technology*, 67(2), 441-453.
52
53
54
55 Welbers, K. & Opgenhaffen, M. (2018) Social media gatekeeping: An analysis of the
56
57
58
59
60

- 1
2
3 gatekeeping influence of newspapers' public Facebook pages, *New Media & Society*,
4 20(12), 4728-4747.
5
6
7 Westbrook, L. (2014). Intimate partner violence online: Expectations and agency in question and
8 answer websites. *Journal of the Association for Information Science and Technology*,
9 66(3), 599-615.
10
11
12
13 Wilson, T. (2009). The behaviour/practice debate: A discussion prompted by Tom
14
15 Wilson's review of Reijo Savolainen's *Everyday information practices: A social*
16 *phenomenological perspective*. Lanham, MD: Scarecrow Press.
17
18
19
20 Xie, B., He, D., Mercer, T., Wang, Y., Wu, D., Fleischmann, K., Zhang, Y., Yoder, L., Stephens,
21 K., Mackert, M., & Lee, M. (2020). Global health crises are also information crises: A
22 call to action. *Journal of the Association for Information Science and Technology*,
23 71(12), 1419-1423.
24
25
26
27 Xu, R., Zhou, J., Zhang, Q., & Hendler, J. (2018). Research on Online Health Communities, A
28 Systematic Review. *Encyclopedia of Social Network Analysis and Mining (2nd edition)*.
29 New York, NY: Springer. <https://doi.org/10.1007/978-1-4939-7131-2>
30
31
32
33 Yoo, S., & Park, J. (2018). Hybrid gatekeeping framework for value-added information services.
34 *Library & Information Science Research*, 40(1), 61-72.
35
36
37 Zhou, Q., Lee, C., & Sin, S. (2018). Beyond mandatory use: Probing the affordances of social
38 media for formal learning in the voluntary context. *Proceedings of the American Society*
39 *for Information Science and Technology*, 55(1), 608-617.
40
41
42
43
44
45
46
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Appendix A. Abridged Interview Guide

1. How did you learn about the VBAC group on Facebook?
2. Why did you decide to be part of this group?
3. How long have you been part of this group?
4. How was your experience at the beginning?
5. How did you learn about the norms or rules to communicate in the group?
6. Do you meet any of the group members in person? Did you talk to any member over the phone? If yes, why? How frequently?
7. Do you see any sub-groups in this group? How so?
8. How did you help others? What is your expertise?
9. What types of information do you come across in this group?
10. How do you typically search for information on the group?
11. What factors influence your decision to use information shared in the group?
12. Why do you think members share their experiences/opinions with others?
13. Who would you consider an expert on this Facebook group?
14. What are the top-3 primary benefits of being part of this group?
15. Why did you decide to continue using this group?

Appendix B. Illustration of Thematic Analysis

Sample Quotations from Interview Transcripts	Sample, Initial Codes	Sample Choices (in Table 2) & Corresponding Sample Activities (in Table 3)	Themes (Information Control Mechanisms)
<p>I decided to go with Facebook because I prefer it over phone calls, and email. Because we can reach everyone in the group, as opposed to me answering 20 emails or phone calls, and it is pretty common with ICAN but not everybody does it.</p> <p>I was so petrified that no one would show up and instead it was the complete opposite. I believe the first meeting we had was like, it was actually one of the largest meetings. We had 25, 27 people.</p>	<p>Who will meet? Where will they meet?</p> <p>Meeting online, Facebook as a social networking platform Face-to-face meetings, Physical location</p>	<p>[Choice] How will members of the group meet?</p> <p>[Activity] Choosing Facebook as an online location for social networking</p> <p>[Activity] Meeting at local, offline locations</p>	<p>Forming the VBAC group over Facebook for local, new mothers</p>
<p>When I told Erica that I was pregnant and really worried about having a VBAC, she was really great. She sent me an invite to the group. When</p>	<p>Who can be a member? Who can be invited?</p>	<p>[Choice] Who can access and contribute to the information on the group?</p>	<p>Actively recruiting women who had a VBAC or have related competencies</p>

<p>1 2 3 4 she sent me that, it just of all 5 fit into place. 6 7 8 9</p>	<p>Pregnant women, Invitation</p>	<p>[Activity] Inviting new mothers to join the group/facilitating access to them</p>	
<p>10 11 So at that point, we made a 12 public page to remove doctors 13 from the group...it was tough. 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30</p>	<p>Whom to remove? How to remove doctors? Identifying members who are not the primary audience of this group, Removing existing members</p>	<p>[Choice] Who cannot access and contribute to the conversations in the group? [Activity] Creating a Facebook page for removing doctors</p>	<p>Removing doctors and solicitors from the group</p>
<p>31 32 I have had some help from the 33 psychology department, they 34 had some printout handouts, 35 of effective communication 36 and listening tools so I used 37 those. 38 39 40 41 42 43 44 45 46 47 48 I did set some pretty firm 49 ground rules that we are here 50 to listen, listening is very key, 51 set some up some ground rules 52 about listening and 53 54 55 56 57 58 59 60</p>	<p>What are the pre- existing best practices? What can the VBAC group learn from it? Prior guidance, Not reinventing the wheel, Help from others Significance of policing communication, Ground rules for communication</p>	<p>[Choice] How should group members interact and share information? [Activity] Identifying and establishing policies, rules, and regulations for communicating in the group</p>	<p>Setting up and revising guidelines for interactions in the group</p>

<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 communication, to not have competition for trauma, so we did have some significant ground rules. At the beginning, I posted articles on how to listen and communicate.</p>			
<p>15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 I think it was seeing other groups go haywire and did not want it to happen in our group like it was happening in others. Kind of been... it is admin heavy, no doubt...I have explained this before to you, that there are several admins and we literally check every single post out. We try and just watch them because they can just get out of control quickly.</p>	<p>How to avoid problems experienced by other groups? Responsibility of admins for controlling member interactions</p>	<p>[Choice] What constitutes irregularity in member interactions and information sharing in the group? [Activity] Monitoring information sharing by members</p>	<p>Maintaining the focus of the group</p>
<p>39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 Once, I reminded all: “Hey guys, just a friendly reminder that advertising is not allowed on the group page. Any ads or related content will be deleted by an admin. We are all here to provide support and comfort to one another, so let's keep that going!”</p>	<p>At what point do administrators need to intervene? Which words can be used for intervention? Activities not allowed in the group, Reminders</p>	<p>[Choice] When and how to intervene? [Activity] Discouraging or suppressing advertisements</p>	

<p>I have to say that, the legacy members, the admins, myself, if we saw posts going in the wrong direction, it just took gentle guidance to get it back on the right track.</p>	<p>Immediately stopping off-topic discussions</p>	<p>[Activity] Timely intervention for identifying and resolving distractions in the group</p>	
<p>There are lots of threads, there is a file section within the group if you are looking for something data-related or some links. About sources, that's a good place to go. They also provide a lot of provider information, as far as being able to go to a doctor and get more information.</p>	<p>How to make information accessible? Which labels to use for making information searchable?</p> <p>Arranging information as per the topic and member needs,</p> <p>Sorting information in the group</p>	<p>[Choice] How can members easily locate the necessary information in the group?</p> <p>[Activity] Organizing information</p>	<p>Initiating distinct threads of conversations</p>
<p>I would say leaders were just right on top of it and they kind of tagged other people who had been in other situations. They just knew exactly what I was asking and then knew who to point me to for that information.</p> <p>Someone will ask a question, someone asks for a</p>	<p>How to define and identify experts?</p> <p>What information can they provide?</p> <p>Asking experienced members to share experiences</p>	<p>[Choices] Who would have the expert information sought by members?</p> <p>Who should be encouraged to share information?</p> <p>[Activity] Invoking experts in the group</p>	<p>Tagging experts in the group</p>

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<p>recommendation on... whether it's a doula or a midwife. So then we will sometimes tag people and say "Hey! Did you guys see this?" And just try and make sure it doesn't fall by the way side.</p>	<p>Seeking recommendations</p>	<p>to participate in conversations where their expertise is needed</p>	
<p>Information by the administrators is reliable and there are science references attached to it. References that aren't like Mother Jones or gaga.org.</p>	<p>Deciding and applying criteria for selecting information sources, Scientific publications, Exploring information in scientific publications, Not relying on any random websites for information</p>	<p>[Choice] How to answer questions? [Activity] Serving as a source of scientific information for members</p>	<p>Correcting misinformation</p>