Digital media and models of biocommunicability in health journalism: insights from the production and reception of mental health news

Kate Holland

Abstract

This article explores some of the ways in which digital and social media are potentially impacting health journalism, with particular attention to a series of interviews with Australian journalists about their experiences when reporting on mental health issues. The article draws on the concept of biocommunicability developed by Briggs and Hallin as a lens through which to examine the ways in which journalists position themselves and other social actors in the construction of health news. In particular, the article engages the question of how digital media may work to enable and constrain biomedical authority, patient-consumer and public sphere orientations to health journalism. The article considers the interview findings in relation to previous research from journalism studies and focuses on issues around sourcing practices, content demands and web traffic/analytics as a measure of audience interest. Some areas for further research are identified.

Introduction

This article explores some of the ways in which digital and social media are potentially affecting health journalism, with particular attention to reporting on mental health issues. It draws on the experiences of nine Australian journalists who report on health for newspapers, television, radio and online. The article engages the concept of "biocommunicability" developed by Briggs and Hallin (2016, p. 8) to capture the performative power of health news in projecting

how knowledge about a health phenomenon "emerges and circulates, and who should attend to it, and how". The concept foregrounds the role of health news and health journalists, not only in the circulation of health and medical knowledge, but also in the co-production of medical objects and subjects.

Biocommunicability and health news/journalism

Briggs and Hallin identify three predominant models of biocommunicability in health news: "biomedical authority", "patient-consumer" and "public sphere". These models identify networks of actors and "project specific expectations for the roles they play in producing, circulating and receiving knowledge" (Briggs & Hallin, 2016, p. 24). The role of the journalist varies within each model. In the biomedical authority model, journalists tend to defer to the expertise of medical professionals for the definition and framing of health issues. Biomedical experts and scientists are the sources and holders of knowledge that journalists are expected to transfer to the "lay" public. The patient-consumer model conceives health knowledge as produced predominantly by medical professionals, but journalists adopt a more flexible positioning in producing reports that also invite audiences to consider the range of options available for understanding and acting on health issues. Audiences are conceived as actively weighing up different options to inform their decision-making. Health information is primarily assumed to be useful in both of these models because it can support individuals to regulate their own behaviour in the interests of their health. Both models assume health problems to be primarily either products of individual biology or behaviour and variously construct subject positions such as passive patients or active consumers (Briggs & Hallin, 2010; 2016).

The public sphere model of biocommunicability is distinct from the biomedical authority and patient-consumer models in that it imagines audiences as engaged citizens and accepts health as a contested, contingent and firmly political concept. Briggs and Hallin (2010, p. 157) suggest this model is about creating "public flows of information that enable citizens to weigh in on public policies and government compliance with them". The public sphere model can be likened to what Hodgetts et al. (2008) refer to as a civic-oriented health journalism, wherein audiences are addressed as having a stake in health issues and journalists assume the role of assisting them in grasping the scope, relevance and potential impact of issues (see also Hodgetts, 2012). It also resonates with what others have identified as the facilitative and interpretive role conceptions of health journalists, which emphasise their role in enhancing public participation, promoting public debate, analysing and interpreting complex health issues and discussing solutions, including working with affected communities and examining their own ideas and initiatives (Hinnant, Jenkins & Subramanian, 2016).

Briggs and Hallin link their thinking in relation to this model to Nancy Fraser's (1990) critical engagement with the Habermasian ideal of the liberal public sphere and her argument that "public spheres are not unitary but layered, composed of separate communities that exchange views among themselves as well as interacting with one another through dominant institutions of the centralized public sphere" (Briggs & Hallin, 2016, p. 41). Briggs and Hallin identify three versions of the public sphere model: standard political models, elite public sphere models and social movement models. The standard model sees issues as situated within the sphere of public policy rather than medicine, with stories often dominated by politicians and addressed to audiences in their roles as policymakers and citizens. The elite model focuses on issues such as conflicts between biomedical professionals, who are accepted by journalists as occupying a specialised public sphere based on their training, clinical experience and peer review. However, reporting also emphasises debate within this field and the potentially corrupting force of political and economic interests, which citizens have a right to observe and judge. This reporting can often involve a journalist's own analysis of public records and draw upon the knowledge of insiders

to lend legitimacy to the expositions, but discussion tends to be restricted to credentialed experts and to exclude ordinary citizens.

The social movement model attributes an important role to social movement actors in shaping biocommunicability and disrupting lay/professional hierarchies. Stories often involve lay activists and their allies challenging biomedical authority, but Briggs and Hallin (2016) found that this variant was rarely evident in health news. In neoliberal societies this model competes with powerful biomedical, pharmaceutical industry and popular cultural narratives in which mental distress is often disconnected from socioeconomic conditions (see Rimke, 2016) and in which journalists often do not see stories about the social determinants of health as relevant to their news organisation's profitable target audiences (Hodgetts et al., 2008; see also Gasher et al., 2007). Briggs and Hallin (2016) suggest the biomedical authority model has been eclipsed to a large extent by that of the patient-consumer, which emphasises health as a commodity of the individual consumer and is often seen in lifestyle journalism and human interest health stories, the popularity of which is increasing as news organisations shift further toward market-driven models of practice.

In the digital media environment, new forms of participation and user-generated content sit alongside institutional journalism, with profound implications for the relationship between journalists, sources and audiences (Domingo et al., 2015; Loosen & Schmidt, 2012; Peters & Witschge, 2015; Singer, 2007). However, relatively little is known about how online and social media may be reshaping health journalism. This exploratory article seeks to build on Briggs and Hallin's work by exploring biocommunicability in relation to the potential effects of digital and social media in terms of enabling and constraining biomedical authority, patient-consumer and public sphere orientations to health journalism.

The study

The strategy for recruiting journalists was guided by my primary interest in those with experience in reporting on mental health issues. Seven specialist health reporters from mainstream news organisations and who were known to have reported on mental health issues were invited to participate, and four were interviewed. Three worked for newspapers and one for television. Four freelance journalists were either known to the researcher as having experience in the area or suggested by other interview participants or colleagues. The trade journalist worked for a publication targeting health professionals, including psychiatrists, and was identified through my exposure to their work over the course of the project. All journalists had experience publishing in the online environment.

The aim of the interviews was to understand the kinds of factors that inform journalists' reporting practices and outputs. The interviews were semi-structured and covered topics such as journalistic experience; interest and role in reporting on mental health issues; characteristics of newsworthy mental health stories; sources of mental health news; challenges reporting on mental health issues; impacts of media reporting; views about stigma; and engagement with online and social media. Interviews were conducted in person in 2015 and ranged in length from 45 to 90 minutes.

This article focuses primarily on sections of the interviews in which journalists discussed their practices in relation to digital and social media. I situate extracts from the interviews in the context of findings from previous research, focusing on two interrelated areas concerning the impacts of digital media on health journalism: sourcing practices and content demands; and web traffic/analytics as a measure of audience interest. In the discussion I reflect on these from the perspective of biocommunicability and identify areas for further research. The observations sketched are preliminary and I do not intend to make any generalisations about the impacts of digitalisation and social media on health journalism. It may be that reporting on mental health is-

sues presents unique challenges for journalists, given lingering cultural stereotypes and concerns about people's vulnerability to media reporting on particular topics (see Holland, 2017b). While it is reasonable to expect that many of the journalists' observations about their reporting in this area would similarly apply in other areas of health, further research in this area might fruitfully compare different health issues.

Sourcing practices and content demands

Financial pressures and the demand for online news content have been linked to the increasing reliance of journalists on information subsidies (Lewis, Williams & Franklin, 2008). Reliance on public relations materials is of course not unique to online journalism and nor is it in itself necessarily a worrying trend, except for the finding that corporate and government sources tend to be the originators of much of the content that journalists reproduce, while the voices of ordinary citizens are largely absent (Lewis et al., 2008). A Belgian study of the sources used in health news across a range of media found that expert and citizen voices were used in equal measure in newspaper and radio reporting, whereas citizen voices were absent in online health news, which frequently used expert academic sources. In television and magazine coverage, by contrast, citizen voices outweighed those of academics and medical doctors (Stroobant, De Dobbelaer & Raeymaeckers, 2017). As journalists face increasing time and resource pressures, which can mean that they have less time to check facts or read published research, a range of agencies are expanding their PR efforts and seeking to capitalise on the "demise" of journalism (Murcott & Williams, 2012, p. 156). Writing about science journalism in particular, Murcott and Williams (2012) suggest journalists are increasingly being forced into the role of "stenographers to strong science news sources" (p. 156). While health journalists may resent performing the disseminator role and the way it can inhibit comprehensive coverage of a health topic, which would be more indicative of a public sphere or facilitative orientation (see Hinnant et al., 2016), findings such as Murcott and Williams's could indicate that the biomedical authority model is retaining a strong presence in health news in the digital media environment.

Research shows the increasing popularity of social media use, especially Twitter, among journalists and media organisations. However, there is some evidence that they tend not to be using it to widen their pool of sources, as mainstream news continues to be dominated by elite sources (Wahl-Jorgensen et al., 2016). Twitter has been identified as a useful source for stories about celebrities, conflict and personalised news, with tweets providing a source of "soft news", especially for popular newspapers (Broersma & Graham, 2013). Twitter provides a convenient and cheap source of news that can allow journalists to access a variety of perspectives and issues that would otherwise have taken much more time to uncover. However, ease of access to tweets may lead to a lack of interrogation, and it is also suggested that elite sources and PR practitioners are adept at using Twitter strategically to obtain more control over the public discourse (Broersma & Graham, 2012; 2013).

Journalists who I interviewed identified an increasing appetite in the online environment for "case studies" of people with lived experience of mental health issues. One print/online journalist said that some of the stories shared most online were personal stories, in contrast to the needs of print: exposing an injustice or policy problem and containing hard numbers and facts. This journalist also said "the whole point of the case study is – to be honest the whole point is the photo, and then secondary to that, the whole point is that someone can look at that person and say, 'that could be me'" (Interview 3). For this reason, anonymous case studies are less likely to appear, which is a potential constraint on covering people with lived experience and also health professionals and advocates who would prefer to remain anonymous, but who nonetheless have important and newsworthy stories to tell. Findings such as these may suggest that online space is more amenable to individual stories and less to "hard" news, perhaps hinting at the limitations

of internet news in enhancing or facilitating a public sphere model of reporting on mental health issues.

While recognising social media as a valuable newsgathering and promotion tool, some journalists expressed caution and reluctance in relation to sourcing people with lived experience from social media. There was a view that it was safer to rely on some of the established mental health organisations (such as Beyondblue, Sane Australia or Headspace) for accessing these sources because they perform a gatekeeping and supportive role. For example, one print/online journalist said:

> … when you get a case study through those organisations, you know that that person has been fully vetted, if you like and they're supported and we know that they're in a place to tell their story. Whereas social media, I have no idea about this person's state of mind […] So when I'm using people from social media, I have to be really careful and I would tend to not use people who have experienced more acute conditions. (Interview 8)

Notwithstanding such caution, social media can enable journalists to invite greater citizen participation in the news-making process. One freelance journalist said she had used Twitter and Facebook for crowdsourcing stories and talent (Interview 5). She recognised these as valuable communities for accessing new voices and stories and emphasised the importance of reciprocity and being actively engaged with the networks. She described how this worked:

> So what I might do, for example, is I might say, "I am thinking of writing about X. Is it a good idea," even?

> *So you'd do that on Twitter?*

> Facebook probably. I might do it on both. Or I'd say, "I'm looking for someone who is recovering from cancer and had a hard time," you know. And then usually a few of my mates who've got thousands of followers, they'll like re-tweet it, and then I'll almost universally get someone amazing. So for example, I just did a story on the way that trolling has real life – well, basically mental health impacts. I wrote it for *Huffington Post* about how damaging it can be in real life. And I wanted someone who'd been really badly trolled.

One of her followers reminded her of a CEO who had been badly trolled and she then interviewed the CEO for the story. As a freelance journalist with a particular interest in social justice, she also discussed the importance of promoting her stories via her social networking sites as part of her "personal branding", which is a less important issue for other journalists whose organisations can do that work on their behalf (Interview 5).

Journalists described a range of different ways of using Twitter in their journalism: to crowdsource stories; to promote their published stories; to promote forthcoming stories on other platforms; and to keep up with other health issues locally and internationally, as well as providing a conduit for exposing their followers to other health stories and benefiting from the sources they follow.

Web traffic/analytics as a measure of audience interest

Research has shown that newsrooms are increasingly using web traffic data to determine audience interest and, in turn, to shape journalism practice and disrupt traditional gatekeeping processes (Adamson, Donaldson & Whitley, 2016; Kammer, 2013; Tandoc, 2014; Welbers et al., 2016). Harcup and O'Neill (2016) suggest that, in the online and social media environment, news values are being adapted to respond more directly to what readers are reading and sharing on

Facebook, for example, and their study found that stories most likely to be shared were those that met the news value of entertainment. In the context of this article, Adamson et al.'s study (2016) is notable as the first to examine mental health news online, focusing particularly on news sharing practices as reported by web analytics. They coded stories for themes of violence and recovery and overall tone, and found that:

> … articles coded as stigmatizing mental illness overall or articles about mental illness that contained themes of violence, criminality, or danger were shared less often. Conversely, articles with an overall positive tone about mental illness or containing themes of recovery and rehabilitation were significantly more likely to be shared more through Facebook and Twitter. (p. 8)

There was also an association between stories deemed to have a positive tone and referral to the news website. The authors suggest these findings appear to challenge the traditional gatekeeping assumption that stories linking mental illness to crime, violence and danger attract audiences. On the one hand, the findings of Adamson et al.'s study may bode well for the role of social media in exposing people to more positive rather than negative news stories about mental health issues by encouraging news organisations to continue to produce such content. Caution is needed, however, in the significance we attach to these findings, given that clicking metrics are by no means a sound indicator of audience engagement or the level of importance or interest they attach to an issue (Costera Meijer & Groot Kormelink, 2015). Other studies also indicate that political stories are poorly shared via social media (Bright, 2016), which may suggest such platforms are limited in terms of circulating stories about the political dimensions of health issues, such as debates about funding and services. Sharing "feel good" stories may give users a sense of gratification, but if such stories come to dominate mental health news this may have a sanitising and depoliticising effect. Stories that do not meet the criteria of positive or recovery-oriented but are nonetheless of pressing concern to consumers, advocates and professionals within the mental health field may be obscured (see Holland, 2017a; 2017b).

Journalists I interviewed pointed to ways in which the online environment is changing their practices positively and negatively. They also suggested metrics are becoming increasingly influential. With more deadlines throughout the day and access to readership metrics they can better tailor stories to particular and dispersed audiences, and also have more space for their stories. There was a view that audiences were having more say in what they care about and that, while politicians may still care what is on the front page of the newspaper, "it's definitely not so important in actually reaching people", as one journalist suggested. This journalist added:

> And, it certainly opened up a lot of space for us online in terms of what type of stories we do, and what type of publication we are. And that can be a bad thing or it can be a really good thing. And, yeah, in terms of actually getting stories out to people that in the past might have been a brief on page 17 of the newspaper because the editors thought people who read *Sydney Morning Herald* don't have schizophrenia, or you can actually completely smash that wide open if you put that story online and find that a lot of people are sharing it, and interacting with it, and caring about it. (Interview 3)

Another print/online journalist similarly suggested that being able to get an indication of the number of readers engaging with individual stories could be a resource for scrutinising editorial decisions and holding editors to account. She said: "... the thing about having stories online, you know how many people read them, because they have statistics on them and data on them." She described the practice of receiving every morning from head office a list of how stories within their network performed online. She said this data can be quite influential and added:

> And that also helps you as a journalist, because you can prove that what you are writing people read. And when they don't put it in the paper but online, and it's the

number two story of the day, and the editors made a decision not to run it in the paper, that sort of raises questions about their editorial judgement, too. (Interview 7)

These comments highlight how the ability to examine the way users interact with stories online may help shatter misconceptions and editorial assumptions about what attracts and holds audiences. Similarly, a freelance journalist said she appreciates being able to see the numbers of people reading her stories because it indicates that she is contributing to a community conversation and, potentially, being a part of social change (Interview 5). Thus, metrics may help to affirm for individual journalists that what they are concerned and writing about does have an engaged audience, potentially encouraging them to continue to cover such issues, as opposed to metrics being used purely to get more traffic for advertisers.

The ability to access story metrics may have its downside if the numbers are low or if the desire to attract clicks jeopardises the veracity of a story or the experiences and realities it is reporting. One journalist observed a tension between attracting readers to a story and ensuring that the story is respectful to the people it is reporting on:

There is definitely a conflict between sort of selling the story and getting people to read your story, and being respectful, you know. And sometimes that doesn't even come from the journalist, it can be about the headline. Because certainly online they are measuring all the metrics – they want people to click on your story, you know. So, yeah, it could be hard to walk that line sometimes. (Interview 5)

A freelance journalist who was also a mental health consumer touched on the idea of journalism increasingly being click-driven and thus focused on celebrities:

So those things are newsworthy because somehow that's what sells advertising space, and that's where it all – it all goes to what people click on. And the audiences really – it's pretty brave sometimes to say, I'm going to rise above that, and tackle harder issues that may not be so clickable. Because headlines is click-bait. It's all driven by clicks. So that's what makes it newsworthy, is in the mind of an editor or a marketer, will I get clicks? (Interview 2)

She acknowledged that the public service aspect of journalism still exists, but this ideal is not immune from click bait as a means of attracting readers and thus advertising buyers. When I asked another journalist how much she thinks about what's of interest to her readership when seeking out and writing stories, she raised the importance of packaging the story to attract an online audience ("like you've just got to package it in a way that gets them to the story and once they're in there, write it in a way that will keep them there"). Her comments implied that she was keen not to allow readership metrics to be too influential over the kinds of stories she writes, which often involve questioning policies around mental health and medicalisation, but that it is a reality and a consideration for editors:

It's a real challenge for everyone at the moment, because the sort of stuff that I do, is there going to be a place for that, because in the world of clicks, I don't want to be sitting down, not typing the story because it might not rate as well online as something about some celebrity or whatever. But yeah, you've got just to do it in a way that's smart. (Interview 8)

Discussion and conclusion

The potential of the internet to enhance communication in the public sphere by enabling a diversity of participants to express their views and to deliberate on policy issues is a widely discussed and debated topic. Scott (2005, pp. 110-111) provides a rather grim but compelling

argument that one of the consequences of online news being subjected increasingly to a "ruthless market calculus" is a shift toward sensational content and away from intelligent commentary, leading him to conclude that "the promise of volume and diversity offered by the internet has turned out to be largely a false prophecy". Based on their interviews with US health journalists, Hinnant et al. (2016) observed that the attributes associated with facilitative health journalism are often in tension with the tight deadlines and profit-centred motives of media organisations and the emphasis on providing quick information to online audiences. The public sphere model in which journalists appeal to audiences as citizens with an important role in assessing the merits of political decision making in relation to health issues may be constrained by the fragmentation of audiences, the subsequent personalisation of news selection and the increasing influence of web analytics. While there is the potential for health journalism to be enhanced by virtue of access to a wide range of websites and online resources and opportunities for citizen participation and collaboration in story sourcing and production, the evidence is mixed about the extent to which this is being realised.

It could be said that the biomedical authority model of biocommunicability may be less prevalent in health news given the sheer availability of alternate sources of health knowledge on the internet. But further research is needed to determine the extent to which journalists are tapping into these sites in any routine way for story sources or ideas. Based on my interviews and a survey of the literature, it would appear that traditional experts are still favoured sources because of their perceived credibility, accessibility and track record in providing comment and commentary. Journalists in my study also noted the increasing news value of "case studies" for connecting with online audiences and the value of established organisations known for their support in preparing consumer speakers for their interactions with journalists. Thus, online mental health news may reproduce the limited range of personal narratives found in traditional mainstream media, rather than expanding the range of voices and views (see Holland, 2017). The proliferation of digital media and the commercial pressures on news organisations could be seen as significant factors in the rise of the patient-consumer model of biocommunicability in health news. This can be seen, for example, in the merging of "health and lifestyle" content, with some believing that the latter (seen as perhaps softer and also less medicalised) is of increasing interest to journalists under pressure to attract audiences in the digital media environment. In many respects this is not surprising given the advertising dollars that could be generated by reports inviting people to entertain a range of products, programs and options marketed as enhancing their health and wellbeing. However, for health journalists there is still the question of newsworthiness, and with so much health and lifestyle information easily accessible to internet users, why would one story option become more attractive to a journalist than another, assuming no external influence from their editors to report an issue that aligns with the commercial interests of their organisations?

The increasing reliance of news organisations and producers on web traffic and reader metrics data raises questions about the kind of news about mental health issues that is likely to attract the required numbers and thus be produced more in the future. Indeed, one print/online journalist offered some predictions about the implications of changes in the media industry for journalism in general and reporting on mental health issues in particular. She suggested there is likely to be a continuing reduction in specialist reporters and an increasing appetite for more entertaining, image-driven content, such as "emotive shareable meme-based content" and content that is easier for journalists to write up. In this context, she suggested advocacy organisations are likely to face increasing difficulties in attracting media attention to "complex, dry things". But, she added, "… if they've got access to those great talent case studies, or interesting weird, crazy emotive stuff then that's going to make it easier for them as well" (Interview 3). Beckett and Deuze (2016) touch on similar issues, suggesting that, in the increasingly competitive news and information media ecology, journalists have to work harder to attract audiences and emotion is an important component of connecting with audiences. They argue that:

> … for journalism to sustain its social, political, and economic added value distinct from the general flow of information and comment, it must reassert the value of critical, independent, constructive journalism with a reconceptualized idea of human interest at its center. (p. 4)

If personal stories are attracting audiences and social media sharing in a crowded media environment, the challenge is how to adapt reporting styles in a way that combines techniques to entertain and appeal to people's emotions in order to expose them to some of the drier political stories that deal with policy and services. Beckett and Deuze refer to storytelling styles and formats that integrate substance and affect, combining data visualisations and infographics with statistical data and the human dimension of social issues. Elsewhere, critical mental health and Mad Studies scholars, including those who see themselves as "survivors" of psychiatry and their allies, offer some pointers to what a reconceptualised idea of human interest in mental health news could look like. They emphasise the importance of connecting the individual experience to "collective and structural experiences of distress, inequality and injustice" (Harper & Speed, 2012, p. 22) and of listening for stories of "resistance and opposition, collective action and social change" (cited in Costa et al., 2012, p. 96). Journalists can perform an important role as intermediaries in pushing the boundaries of dominant discourses about mental distress by tapping into and forming alliances with consumers, activists and scholars who are producing counter-discourses. Civic-oriented journalists and social scientists could work more closely to extend health coverage to more fully reflect social determinants of health and the experiences of those who are often marginalised in discussions of health (Hodgetts, 2012). Building alliances with social movement actors who may be resistant to, or whose interests and priorities are not represented by, mainstream mental health organisations or mainstream media could facilitate a public sphere orientation to reporting. There are numerous resources, online and offline, that journalists could consult for story ideas and sources in a way that disrupts the institutionalised relations between journalists and those sources who have privileged access to media and resources to invest in sustained media-oriented practices.

This article has offered some preliminary suggestions about how digital media may work to enable and constrain biomedical authority, patient-consumer and public sphere orientations to health journalism. The question of how particular features of the digital media environment, such as increased opportunities for interactivity, transparency, citizen journalism and media criticism, may be facilitating different types and circuits of mental health news remains an area in need of further investigation. Digital and social media expand the opportunities for users to share their criticisms of mainstream media representations, to become gatekeepers of news within their own social networks, and to direct others to alternative online resources and perspectives (see Carlson, 2016). An interest in media criticism ("lay" and academic) and its functions could be usefully linked to work on biocommunicability in that such discourse serves as sites through which actors project assumptions and expectations about health knowledge: who has it, who needs it, how they are expected to get it, and what they are expected to do with it. Further research building on that of Adamson et al. (2016) into mental health news online and what motivates news consumers to share particular types of content would also be valuable. This could include examining the extent to which the sources used in news stories affect audience reading and sharing practices. Similarly, how are hyperlinks, hashtags and images being used in online health news, for what purposes, and with what consequences? Further research could also help to uncover if and in what ways different actors interact and communities emerge in relation to health news online and how such practices intersect with offline forms of health communication.

References

Adamson, G., Donaldson, L., & Whitley, R. (2016). Sharing recovery stories: network gatekeeping of online news about mental illness. *Digital Journalism.* doi: 10.1080/21670811.2016.1224671

Beckett, C., & Deuze, M. (2016). On the role of emotion in the future of journalism. *Social Media + Society,* 1-6. doi: 10.1177/2056305116662395

Briggs, C. L., & Hallin, D. C. (2016). *Making health public: how news coverage is remaking media, medicine and contemporary life.* Abingdon, Oxon: Routledge.

Briggs, C. L., & Hallin, D. C. (2010). Health reporting as political reporting: biocommunicability and the public sphere. *Journalism, 11*(2), 149-165. doi: 10.1177/1464884909355732

Bright, J. (2016). The social news gap: how news reading and news sharing diverge. *Journal of Communication,* 66, 343-365. doi: 10.1111/jcom.12232/abstract

Broersma, M., & Graham, T. (2013). Twitter as a news source. *Journalism Practice, 7*(4), 446-464. doi: 10.1080/17512786.2013.802481

Broersma, M., & Graham, T. (2012). Social media as beat. *Journalism Practice, 6*(3), 403-419. doi: 10.1080/17512786.2012.663626

Carlson, M. (2016). Embedded links, embedded meanings. *Journalism Studies, 17*(7), 915-924. doi: 10.1080/1461670X.2016.1169210

Costa, L., Voronka, J., Landry, D., Reid, J., Mcfarlane, B., & Reville, D. (2012). Recovering our stories: a small act of resistance. *Studies in Social Justice, 6*(1), 85-101.

Costera Meijer, I., & Groot Kormelink, T. (2015). Checking, sharing, clicking and linking: changing patterns of news use between 2004 and 2014. *Digital Journalism, 3*(5), 664-679. doi: 10.1080/21670811.2014.937149

Domingo, D., Masip, P., & Costera Meijer, I. (2015). Tracing digital news networks: towards an integrated framework of the dynamics of news production, circulation and use. *Digital Journalism, 3*(1), 53-67. doi: 10.1080/21670811.2014.927996

Fraser, N. (1990). Rethinking the public sphere: a contribution to the critique of actually existing democracy. *Social Text,* 25/26, 56-80.

Gasher, M., Hayes, M., Hackett, R., Gutstein, D., Ross, I., & Dunn, J. 2007. Spreading the news: social determinants of health reportage in Canadian daily newspapers. *Canadian Journal of Communication, 32*(3&4), 557-574.

Harcup, T., & O'Neill, D. (2016). What is news?: news values revisited (again). *Journalism Studies.* doi: 10.1080/1461670X.2016.1150193

Harper, D., & Speed, E. (2012). Uncovering recovery: the resistible rise of recovery and resilience. *Studies in Social Justice, 6*(1), 9-26.

Hinnant, A., Jenkins, J., & Subramanian, R. (2016). Health journalist role conceptions: existing and emerging professional identities. *Journalism Practice, 10*(6), 763-781. doi: 10.1080/17512786.2015.1053509

Hodgetts, D., Chamberlain, K., Scammell, M., Karapu, R., & Waimarie Nikora, L. (2008). Constructing health news: possibilities for a civic-oriented journalism. *Health, 12*(1), 43-66.

Hodgetts, D. (2012). Civic journalism meets civic social science: foregrounding social determinants in health coverage. *Communiçacão e Sociedade,* Número Especial, 23-38.

Holland, K. (2017a). Biocommunicability and the politics of mental health: an analysis of responses to the ABC's "Mental As" campaign. *Communication Research & Practice, 3*(2), 176-193. doi: 10.1080/22041451.2016.1228977

Holland, K. (2017b). Making mental health news: Australian journalists' views on news values, sources and reporting challenges. *Journalism Studies.* doi: 10.1080/1461670X.2017.1304826

Kammer, A. (2013). The mediatization of journalism. *MedieKultur,* 54, 141-158.

Lewis, J., Williams, A., & Franklin, B. (2008). Four rumours and an explanation: a political economic account of journalists' changing newsgathering and reporting practices. *Journalism Practice, 2*(1), 27-45. doi: 10.1080/17512780701768493

Loosen, W., & Schmidt, J. (2012). (Re-)Discovering the audience: the relationship between journalism and audience in networked digital media. *Information, Communication & Society, 15*(6), 867-887. doi: 10.1080/1369118X.2012.665467

Murcott, T. H. L., & Williams, A. (2012). The challenges for science journalism in the UK. *Progress in Physical Geography, 37*(2), 152-160. doi: 10.1177/0309133312471285

Peters, C., & Witschge, T. (2015). From grand narratives pf democracy to small expectations of participation: audiences, citizenship, and interactive tools in digital journalism. *Journalism Practice, 9*(1), 19-34. doi: 10.1177/0309133312471285

Rimke, H. (2016). Introduction – mental and emotional distress as a social justice issue: beyond psychocentrism. *Studies in Social Justice, 10*(1), 4-17.

Scott, B. (2005). A contemporary history of digital journalism. *Television & New Media, 6*(1), 89-126. doi: 10.1177/1527476403255824

Singer, J. (2007). Contested autonomy: professional and popular claims on journalistic norms. *Journalism Studies, 8*(1), 79-95. doi: 10.1080/14616700601056866

Stroobant, J., De Dobbelaer, R., & Raeymaeckers, K. (2017). Tracing the sources: a comparative content analysis of Belgian health news. *Journalism Practice,* 1-18. doi: 10.1080/17512786.2017.1294027

Tandoc, E. C. (2014). Journalism is twerking?: how web analytics is changing the process of gatekeeping. *New Media & Society, 16*(4), 559-575. doi: 10.1177/1461444814530541

Wahl-Jorgensen, K., Williams, A., Sambrook, R., Harris, J., Garcia-Blanco, I., Dencik, L., Cushion, S., Carter, C., & Allan, S. (2016). The future of journalism: risks, threats and opportunities. *Journalism Studies, 17*(7), 801-807. doi: 10.1080/21670811.2016.1199469

Welbers, K., Van Atteveldt, W., Kleinnijenhuis, J., Ruigrok, N., & Schaper, J. (2016). News selection criteria in the digital age: professional norms versus online audience metrics. *Journalism, 17*(8), 1037-1053. doi: 10.1177/1464884915595474

Author

Kate Holland is a senior research fellow with the News & Media Research Centre at the University of Canberra. This research was supported by an Australian Research Council Discovery Early Career Researcher Award DE140100100 "Mediating Mental Health: An Integrated Approach to Investigating Media and Social Actors".