Information Intermediaries and Information Resilience: Working to Support Marginalised Groups

Nicol, EmmaUniversity of Strathclyde, UK | emma.nicol@strath.ac.ukWillson, RebekahMcGill University, Canada | rebekah.willson@mcgill.caRuthven, IanUniversity of Strathclyde, UK | ian.ruthven@strath.ac.ukElsweiler, DavidRegensburg University, Germany | david.elsweiler.ur.de

Buchanan, George University of Melbourne, Australia | george.buchanan@unimelb.edu.au

ABSTRACT

Information resilience has become a topic of interest to the information science community in recent years. The COVID-19 pandemic has shone a light on the vulnerability of information and other networks and the impact on information providers and the information seekers who rely on them. In an exploratory study, we interviewed support workers who act as information intermediaries as part of their work roles about their experiences of providing information to vulnerable and marginalised people during the UK COVID-19 lockdown. We present findings organised in three themes: *shifting client information needs and support provisions, adjusting information sharing and communication practices and workarounds for physical information work.* Throughout the themes, information resilience is evident as information intermediaries adapt their work practices to ensure they can continue to serve their clients. In this first stage of research our findings provide insight into the changes to information intermediaries' information behaviour and information work during a crisis, as well as the impact of these changes on the services they provide.

KEYWORDS

Information behaviour; Informal networks; Information resilience; Marginalisation.

INTRODUCTION

Many professionals provide information and support to marginalised populations. Working as information intermediaries (Buchanan et al., 2019) or proxies (McKenzie, 2003), they liaise between the complicated worlds of information, services, and clients. These information intermediaries - including public librarians, refugee support workers, and health care providers - often work with clients in crisis, whose needs are time-critical, and in situations where providing the wrong information can have severe consequences, such as not receiving financial support, or becoming homeless. Decades of effort have gone into creating supportive information services for these groups as we know that individuals who are vulnerable (someone who belongs to a group of people that is oppressed or more susceptible to harm) or marginalised (someone who belongs to a group of people at the margins of society whose needs are persistently ignored or overlooked) (Gibson & Martin, 2019, p. 476) might be particularly sensitive to the failure of information services which can exacerbate pre-existing inequalities. During times of crisis (e.g., medical emergencies, natural disasters) information intermediaries' work is particularly important. Not only has the COVID-19 pandemic increased information needs, it has also forced major and abrupt changes to the work of many information intermediaries. For many public and third-sector organisations, the move to working online necessitated a fundamental shift in how core business is conducted, including how information services are provided. With little or no time to prepare for the disruptions that the pandemic would cause, information intermediaries had to work quickly to deal with changes to their workplaces and professional roles, often using workarounds and repurposing processes and technologies to fit their new situations. We wanted to discover how information intermediaries grappled with the evolving pandemic situation and changing government guidelines to provide information to clients and improvise new ways to help connect them to resources; in short, how information intermediaries enacted information resiliency and encouraged it in their clients. In this exploratory study, we sought to address the following questions:

1. How has the information behaviour of information intermediaries changed during the pandemic? 2. What are the consequences of these changes to information behaviour in terms of workplace information sharing, information work, and client services? 3. What do these changes mean for information resilience and service provision?

RELATED WORK

Information intermediaries are those who undertake information work by acting for others as mediums or agents of information. Long associated with librarians and educators (Buchanan et al., 2018) the term has been broadened to include information professions such as social work, health, law, and support services generally, as well as lay intermediaries (Abrahamson & Fisher, 2007). Intermediaries are "a vital component in information behavior" (Case & Given, 2016, p. 362). However, few studies have examined the perspectives of professionals who act as information

85th Annual Meeting of the Association for Information Science & Technology | Oct. 29 – Nov. 1, 2022 | Pittsburgh, PA. Author(s) retain copyright, but ASIS&T receives an exclusive publication license.

intermediaries in community-based support roles (Buchanan et al., 2018). More attention has been paid to the individuals and groups served by these intermediaries, who may have difficulty accessing information. Information poverty (Chatman 1996) has been used to refer to "a persistent lack of information access as experienced by a group or an individual, usually as a result of social factors, embodied by various types of information-related inequalities" (Gibson & Martin, 2019, p. 476). Gibson and Martin (2019) noted that research on information poverty has focused on the behaviour of individuals experiencing the phenomenon rather than on institutions where such marginalisation is created and thus proposed "information marginalisation" to address this deficit. Information intermediaries assist marginalised groups in navigating information marginalisation, but their important role in this is under researched. Lloyd (2015) describes information resilience as being predicated upon "learning how to enter, map and navigate new environments; creating communal relationships with others in order to draw from internal and external banks of knowledge; of sharing information; and, in turn, developing shared understanding and meanings" (p. 1030). While some research has focused on the information resilience of marginalised individuals experiencing disruption, for example, the life transitions of refugees (Lloyd, 2015), the professional information resilience of the intermediaries with whom such populations interact remains largely unexamined. Willson et al. (2020) recognise the importance of informal networks to the information access of marginalised groups and those who experience information poverty or lack information capital, the capacity to access information (Counts & Fisher, 2010). Informal networks lack a structure or purpose; they are "a loose connection of individuals who regularly interact with one another, who may or may not share interests" (Willson et al. 2020, p. 1). Despite recent research on informal networks, the information science community has yet to develop a systematic understanding of the phenomenon among marginalised groups nor an understanding of the role of such networks in interactions between those groups and information intermediaries. Work places people in distinct environments where they are expected to interact with information to accomplish tasks specific to their role and workplace. This is information work. Byström et al. (2019) have argued for more dedicated scholarship in the area of information work situated in workplaces, with the reasoning that workplaces have changed radically since the earliest research and thus existing frameworks, which related to largely physical workspaces and documents, are now inadequate for describing current information work practices (Byström et al., 2016). COVID-19 is radically redefining and reshaping information experiences (Lloyd & Hicks, 2020; 2021; Xie et al., 2020), including those in the workplace. The new reality of much information work has involved identifying cognitive authorities, mediating misinformation and navigating the evolution of pandemic regulations and changing social expectations (Lloyd & Hicks, 2020). Teevan et al. (2007) described information fragmentation where information required to complete even simple tasks is scattered in several forms across multiple locations, devices and organisations. Lockdown homeworking created new vectors for fragmentation: information workers interact with clients, colleagues and agencies via unfamiliar or repurposed media as previous interaction routes become unavailable (Nicol et al., 2021), making complex information tasks even more challenging. Information overload and information avoidance are evident as people manage mental health impacts of pandemic disruption (Lloyd & Hicks, 2020; 2021).

METHODS

We conducted an exploratory study taking a qualitative approach using semi-structured interviews to investigate the pandemic experiences of those who act as information intermediaries in their job role as support workers.

Participants

We focused on information intermediaries who have significant, direct contact with clients. Four interviews were conducted - two with constituency caseworkers and two with disability support workers. Caseworkers, who work in the approximately 1000 constituency offices of members of the UK Parliament and devolved administrations, assist the public with enquiries regarding highly complex issues, such as immigration and housing. Many contacts are from highly marginalised and vulnerable individuals for whom accessing information and assistance can be extremely challenging. One disability support worker was university based and worked to ensure that disabled students receive the support needed for their studies, including information about disability assessment, counselling, teaching and learning adjustments, and support for communication plus information about support from outside agencies (e.g., health or finance). The other disability support worker worked for a general disability information service.

Data Collection and Analysis

Semi-structured interviews lasting approximately 60 minutes were conducted via videoconference. The study was approved by the University of Strathclyde's Ethics Committee. Participants were known to researchers and recruitment took place via direct email. Interviews covered participants' role in information provision; types of information requested/provided; ways information is provided; challenges of information provision; and changes due to COVID-19 restrictions (including new types of information requested, new uses of technology, new challenges, and responses to those challenges). Interviews were audio recorded, transcribed, and participants given pseudonyms. Deductive analysis was undertaken using themes identified in the literature and in previous work by the research team. Themes were examined iteratively and refined in refined in discussion between project team members. The themes

identified were: 1. shifting client information needs and support provisions, 2. adjusting information sharing and communication practices 3. workarounds for physical information work.

RESULTS

The interviews revealed the dramatic effects of the pandemic on the information work of intermediaries in their support of marginalised people, requiring significant information resiliency. Each theme is addressed in turn with supporting quotes from participants. While quotes demonstrate best examples of the themes, they often include several different aspects of information work taking place simultaneously. As such, themes are not mutually exclusive. In particular, the impact of working from home and moving to online-only service provision is discussed throughout.

Shifting client information needs and support provisions

All participants reported a dramatic increase in the volume of enquiries during COVID-19 lockdown restrictions. For constituency workers, welfare benefits enquiries increased as employment opportunities became more limited. Constituency workers had many contacts for help with interpreting the evolving COVID-19 guidelines. For example, Emily (a constituency worker) reported being asked, "Am I allowed to visit my mum?". Once such a question was answered, there were often repeat requests for information with each guideline change. Madeleine and Lizzie, disability support workers, noted a dramatic rise in benefits and financial hardship enquiries related to students' studies. Such assistance was often key to enabling disabled students to purchase equipment to access their studies and delays had big impacts, particularly for those who previously relied on library facilities. Disability support workers also reported significant increases in enquiries about emotional support due to isolation, as students adapted to online learning and social opportunities lessened. Lizzie noted a huge rise in information requests about delivery of food and medicine and, sadly, about how to gather evidence to make a police complaint in response to disability-related hate crimes (often related to mask wearing). While disability support workers received increased information requests about food delivery, constituency workers saw a surprising change in food assistance requests. Pre-pandemic, many constituents required help from foodbanks. Typically, referrals were made in-person in the office but when lockdown began and the office closed, despite such need doubtless continuing, Emily noted that "foodbank referral requests disappeared overnight". Pre-lockdown, constituents with little English or with communication difficulties often relied on presenting physical documents, such as government letters, to explain their information needs. The numbers requesting information on such issues declined dramatically due to the lack of in-person communication available, even though the need for such assistance had likely not declined. How marginalised groups were able to express their information needs changed during the pandemic, which has implications for information and support services.

Adjusting information sharing and communication practices

All participants reported changes to information and communication practices. All had worked in open-plan offices before working from home during the pandemic. Lizzie described how in the office they would provide support to colleagues on phone calls with clients by performing internet or book research on the issue being discussed and by sharing the information verbally, by email, or on a notepad. Being able to hear each other's calls and to share information in this way provided, she felt, a better service for clients and a learning opportunity for less experienced staff. Lizzie noted this mode of information exchange had been lost, though colleagues now exchanged some information and guidance via electronic chat. Similarly, Gabriel a constituency worker, described homeworking as "working in silos", with the lack of immediate access to a multi-expertise team a hindrance to their support of clients. Madeleine stated that work was "hindered by the lack of informal chats ... the things that fall between the big stuff you'd set up a meeting about. You can't express the nuance in an email'. The effect of working in silos also arose from choices organisations made around phone redirection. Pre-pandemic, anyone in Gabriel's constituency office answered the phone, but with staff working from home, calls were routed to one person on a rotating basis. Constituents were much less likely to get through to someone at all, less likely to reach someone with the expertise required to answer their query, and less likely to speak to someone they had already spoken to, so continuity was lost. Emily also noted that phone redirection in her office to one staff member also meant that messages were often mislaid or not passed on. While opportunities for informal information exchange were diminished, Madeleine explained how the introduction of weekly online team meetings, initially created for staff social support, provided new routes for information exchange with colleagues, and a more multi-disciplinary approach to student support. Madeleine also outlined benefits of the organisation's move away from the physical office; previously, many students would request phone meetings in place of in-person meetings due to mobility, anxiety, or transportation issues. The adoption of videoconferencing has advantages for students for whom physical meetings were difficult and for support workers who can gather more information from students by seeing them in their home environment. As Madeleine stated, "sometimes it's good to get your eyes on a student to see how they really are".

Workarounds for physical information work

Working from home had some serious and often unforeseen consequences. Participants noted that many vulnerable

clients were calling them for information due to government and council departments "not answering phone calls" (Lizzie) and that services had begun advising contact via email only, which was not available to all clients. Madeleine noted that student finance moved to email-only contact, meaning queries from disability support workers were not answered quickly, resulting in significant delays to disbursement of money and equipment. The move to email-only services meant that information work processes also changed. Pre-pandemic, disability support workers obtained students' signatures on physical documents during face-to-face meetings, scanned and then emailed them to funders. During the pandemic, electronic signatures were required. However, Madeleine found that it often took huge effort to get students to sign and return documents electronically, causing delays to assistance. Emily noted that during the pandemic, photos of signed mandates "suddenly became acceptable" in many interactions between constituency workers and public bodies. For example, Gabriel described how the National Health Service would now "accept an email trail because you are not meeting the client in person" though this was not always straightforward. "If someone phones with a medical enquiry ... we have to ask them to email us ... which is fine if it's james.brown@gmail.com, but if it's a nickname ... [it's harder to show it's genuine]." In addition to the challenges in providing services to clients over email, information intermediaries working from home had to find workarounds for paper-based workflows which involved significant workload to achieve. Previously, participants had more flexibility with the formats in which information was provided, basing provision on client need. This was more difficult during physical office closures due to caseworkers' limited access to facilities. Gabriel noted that "I now spend a lot of time turning letters into PDFs to email out" However, a more convoluted process is required for clients without email access, "I... email a colleague who has the office printer in his house and say, you need to go into A.'s case and print this letter, create a cover letter and put them in the same envelope". Lizzie also mentioned having to rely on contacting the only colleague with printer access in order to convey printed information to clients. Madeleine said that while she felt some services such as hers, had moved quickly to all digital provision with limited disruptions, this was in contrast to the experience of colleagues in other services that had previously been heavily reliant on paper and now struggled to provide continuity of support.

DISCUSSION AND CONCLUSIONS

RO1 addressed the change in information intermediaries' information behaviour during the pandemic and RO2 addressed the consequences of these changes. In their role of providing information and services for others, the shift in client information needs led to changes in the type of information work participants undertook. Shifting information needs happen during times of transition and uncertainty (e.g., Westbrook, 2009; Willson, 2019); clients needed practical information about a range of topics, such as interpreting government guidelines, having necessities delivered, or getting support for moving to online study. Clients experienced information marginalisation (Gibson & Martin, 2019) as systems for receiving information and support were no longer able to operate as they had been, and often broke down. Information intermediaries were also required to provide new types of information and to learn how to navigate new information processes that were suddenly moved online. Participants could no longer work collaboratively and share information during client calls and information work became more siloed when working from home, making providing services more difficult. Information sharing between colleagues is key for many workers to find the workplace information they need (e.g., Cross & Sproul, 2004; Willson, 2019). When working alone at home, accessing informal networks (e.g., Willson et al., 2020) and encountering information (Erdelez & Marki, 2020) become much more difficult. COVID-19 highlighted vulnerabilities in information sharing and management that were previously taken for granted, demonstrating how susceptible to disruption services can be. This has serious consequences when services are so essential for those who are among the most marginalised. RQ3 addressed information resilience. Information intermediaries (and clients) had to become information resilient in order get the information and support needed during the pandemic, which is an ongoingly changing and uncertain situation. For participants, this meant providing information on new topics (such as interpreting government COVID-19 guidelines) and trying to be on top of shifting rules and work processes. During disruptive life events, knowledge bases are no longer sufficient for the situation and "reorienting, adjusting, and reframing" (Lloyd, 2015, p. 1034) are needed to gain the information required. Information resilience often took the form of workarounds when dealing with the sudden shift from paper-based to online systems, including working with clients over email, capturing electronic signatures, and engaging in (at times) convoluted processes of emailing, printing, and scanning documents to complete work processes. While information was lost by not meeting clients in person, adapting old technologies for new purposes (e.g., printing, scanning) and adopting new technologies (e.g., videoconferencing) was important for participants to be able to provide services to marginalised clients and meet them where they are. This study explored gaps in our understanding of the work of information intermediaries working with marginalised groups, particularly during the uncertainty of the pandemic. By studying their experiences and information work we can better understand how their information behaviour has changed during a crisis, as well as the consequences of those changes on the services they provide. During the pandemic, participants demonstrated information resilience by adapting work practices to try to ensure clients continue to receive the information and help they need. This is the first stage of a research programme to investigate the information resilience of information intermediaries who support marginalised people in crisis situations. Future work will involve increased participants and varied contexts.

REFERENCES

- Abrahamson, J.A., & Fisher, K.E. (2007). What's past is prologue: Towards a general model of lay information mediary behaviour. *Information Research*, 12, 1–21. http://informationr.net/ir/12-4/colis/colis15.html
- Buchanan, S., Jardine, C., & Ruthven, I. (2019). Information behaviors in disadvantaged and dependent circumstances and the role of information intermediaries. *Journal of the Association for Information Science & Technology*, 70(2), 117–129. https://doi-org.proxy3.library.mcgill.ca/10.1002/asi.24110
- Byström, K., Ruthven, I., & Heinström, J. (2016). Work and information: Which workplace models still work in modern digital workplaces? *Information Research*, 22(1), CoLIS paper 1651. http://InformationR.net/ir/22-1/colis/colis1651.html
- Byström, K., Heinström, J., & Ruthven, I. (2019). Information at work. Facet Publishing.
- Case, D., & Given, L.M. (2016). *Looking for information: A survey of research on information seeking, needs, and behavior* (4th ed.). Emerald Publishing.
- Chatman, E. A. (1996). The impoverished life-world of outsiders. *Journal of the American Society for Information Science*, 47(3), 193–206.
- Counts, S., & Fisher, K. E. (2010). Mobile social networking as information ground: A case study. *Library & Information Science Research*, 32(2), 98–115. https://doi.org/10.1016/j.lisr.2009.10.003
- Cross, R. and Sproull, L. (2004). More than an answer: Information relationships for actionable knowledge. *Organization Science*, *15*(4), 446-462.
- Erdelez, S., & Makri, S. (2020). Information encountering re-encountered: A conceptual re-examination of serendipity in the context of information acquisition. *Journal of Documentation*, 76(3), 731–751. https://doi.org/10.1108/JD-08-2019-0151
- Gibson, A. N., & Martin, J. D. (2019). Re-situating information poverty: Information marginalization and parents of individuals with disabilities. *Journal of the Association for Information Science & Technology*, 70(5), 476–487. https://doi.org/10.1002/asi.24128
- Lloyd, A. (2015). Stranger in a strange land: Enabling information resilience in resettlement landscapes. *Journal of Documentation*, 71(5), 1029–1042. https://doi.org/10.1108/JD-04-2014-0065
- Lloyd, A., & Hicks, A. (2020). Risk and resilience in radically redefined information environments; information practices during the COVID-19 pandemic. *Proceedings of the Association for Information Science and Technology*, *57*(1), e336. https://doi.org/10.1002/pra2.336
- Lloyd, A., & Hicks, A. (2021). Contextualising risk: The unfolding information work and practices of people during the COVID-19 pandemic. *Journal of Documentation*, 77(5), 1052-1072. https://doi.org/10.1108/JD-11-2020-0203
- McKenzie, P. J. (2003). A model of information practices in accounts of everyday-life information seeking. *Journal of Documentation*, 59(1), 19–40. https://doi.org/10.1108/00220410310457993
- Nicol, E., Htait, A., Azzopardi, L., & Moncur, W. (2021). Towards identifying, understanding and controlling cumulative revelations in social media. *Proceedings of the Association for Information Science and Technology*, 58(1), 798-800. https://doi.org/10.1002/pra2.566
- Teevan, J., Capra, R., Pérez-Quiñones, M. (2007). How People Find Personal Information. In Jones, W. P., Jones, W., & Teevan, J. (Eds.). *Personal Information Management*. University of Washington Press.
- Westbrook, L. (2009). Crisis information concerns: Information needs of domestic violence survivors. *Information Processing & Management*, 45(1), 98–114. https://doi.org/10.1016/j.ipm.2008.05.005
- Willson, R. (2019). Transitions Theory and liminality in information behaviour research: Applying new theories to examine the transition to early career academics. *Journal of Documentation*, 75(4), 838-856. https://doi.org/10.1108/JD-12-2018-0207
- Willson, R., Buchanan, G., Burnett, G., Ellison, N., Erdelez, S., & Twidale, M. (2020). My favorite unreliable source? Information sharing and acquisition through informal networks. *Proceedings of the Association for Information Science and Technology*, *57*(1), e294. https://doi.org/10.1002/pra2.294
- Xie, B., He, D., Mercer, T., Wang, Y., Wu, D., Fleischmann, K. R., ... & Lee, M. K. (2020). Global health crises are also information crises: A call to action. *Journal of the Association for Information Science and Technology*, 71(12), 1419-1423. https://doi.org/10.1002/asi.24357