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Reaching the disadvantaged and disengaged in times of crisis: towards an understanding of information behaviours to inform interventions.

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Abstract:
A report on three UK studies seeking to better understand information behaviours in disadvantaged and disengaged circumstances, explore issues of social integration, and inform public library interventions. Heightened access and internalised behavioural barriers are reported beyond those common to the general population, the former influenced by technology and literacy issues, the latter by social structures and norms; barriers consigning many of our subjects to a stratified existence within an impoverished (small) information world. There is evidence suggestive of deception, risk-taking, secrecy, and situational relevance in information behaviours, and a reliance on bonding social capital characteristically exclusive and inward facing. In such circumstances public libraries can provide a key information access and support role, and community role, but there is little evidence of their use. Findings suggest that a rethink is needed in how public libraries meet the information needs of people in disadvantaged and disengaged circumstances. We suggest that a more proactive outreach approach is needed that sensitively addresses issues of trust, confidence and self-efficacy. Action-oriented interdisciplinary research appears warranted to support such activity, which importantly, focuses on influencing information behaviours.

Keywords: information behaviour; information poverty; information literacy.

Introduction
Information informs, guides, and empowers; but persistent barriers to access and use are societally divisive and as yet not fully understood, particularly amongst marginalised and disadvantaged groups. Exploring enduring issues of information poverty, we report on three UK studies seeking to better understand information behaviours in disadvantaged and disengaged circumstances, explore issues of social integration, and inform public library interventions.
Methodology

Our overarching interdisciplinary theoretical framework brings together theories of information behaviour (Chatman’s (1996) theories of information poverty in particular) with theories of social capital to better understand human information behaviours in disadvantaged and disengaged circumstances, explore issues of social engagement, and inform public library interventions.

Each of the three studies reported were of mixed method design variously incorporating observation, semi-structured interviews, and focus groups. Observation provided a degree of immersion in the research environment (drop-in support groups), with information behaviors, social interactions and experiences observed. Semi-structured interviews provided a degree of cognitive insight and understanding of attitudes and motivations, and their influence on information behaviours and social interactions. During interviews, critical incident technique was used to focus discussion on important real life scenarios and needs, and encourage participants to describe actual activities undertaken (Johnson, 2004). Focus groups allowed us to further explore information behaviours, and observe how individuals discussed behaviours as a group (providing insight into group interactions and opinions).

Data analysis was approached deductively, and conducted recursively in parallel to and post collection. Thematic analysis followed an approach similar to Braun and Clarke (2006) with data disaggregated into meaningful categories via identification of patterns and regularities through a process of iterative pattern coding. Narrative analysis (of interview transcripts) was conducted to provide temporal sequence and context to information behaviours, and shift attention from “what happened” to “how people make sense of what happened” including their sense of place and sense of role within recalled events (Bryman, 2012, p582). Findings were cross-checked and verified via triangulation.

All three studies were conducted in areas of multiple deprivation identified via the Scottish Index of Multiple Deprivation (SIMD, 2012) and conducted in cooperation with public and third sector organisations (see Acknowledgements).

The information behaviours of disadvantaged and disengaged groups

Study one: first-time mothers

Becoming a mother is a major life event which affects a woman’s concept of identity, and in relation, her self-perceived information needs which grow significantly alongside her new responsibilities (McKellar et al., 2009; Hjalmhult & Lomborg, 2012). Particularly heavy demands are placed upon first-time mothers who are more prone to post-natal depression than multiparous women (Leahy Warren, 2005). Informational support helps mothers feel prepared and confident for their new role, and eases the transition to parenthood (Leahy Warren, 2005; Darvill et al., 2008; McKellar et al., 2009). However, in the UK, an increasing proportion of new mothers are now discharged from hospital within one day of giving birth (Donnelly, 2008); and while greater societal demands and expectations are now placed on mothers, traditional sources of information via family and community networks have eroded or fragmented in modern society (Drentea and Moren-Cross, 2005). State support is evident through wide-ranging projects and programmes, but without “unambiguous evidence of sustained positive impact” (MacLeod, 2012). In a survey involving 2366 mothers (Scottish Government, 2014), 44% of mothers reported unmet information needs during antenatal care, and 39% during postnatal care. Further studies report similar unmet information needs, particularly amongst young first time mothers, and call for tailored parental information support (e.g. Harden et al., 2006; Coltart, 2007).

Over a period of eight weeks first-time mothers aged 22-43 were observed attending a drop-in support group in an area of multiple deprivations, with twenty-two participating in follow-on group interviews. Five support workers were also interviewed.
During observation and interview, mothers described their information needs during the first year of their infant’s lives as being multiple, interrelated, and at times difficult to distinguish from one another. Ranked by importance, information needs associated with sleeping, feeding, weaning, and health care were identified as most pressing, followed by information needs associated with family welfare, mother-infant groups/activities, and products. Mothers reported frequently occurring problems as those which felt most urgent:

…it was like a problem all the time… [I was] looking for information all the time.

In relation, several reported difficulty in identifying individual needs, or accurately identifying the source of a problem, as one issue could compound another:

I think we had a problem with the feeding, but it was affecting the sleeping…

There was general group consensus that in the first year of their infants’ lives, mothers experienced multiple information gaps. As one put it, “there’s a lot of stuff to get to know”. One mother of two reported that she had been upset by her health visitor’s presumption that her needs for information would be much less the second time round, and had been left feeling embarrassed:

I felt stupid…and it’s not like I was a first-time mum, but it’s just different circumstances.

During group interviews, mothers identified and discussed key sources of information and individually rated them according to frequency of use, importance, and usefulness, on a scale of 1-5 (not at all-not very-somewhat-quite-very) as illustrated in Figure 1.

![Figure 1. Median ratings of information source by frequency of use, importance & usefulness (Louden et al, 2016)](image_url)

There was group consensus that the common experience of other mothers and family was highly valued. The majority of mothers reported seeking information or advice from other mothers and family actively and serendipitously, and in relation, a preference for face-to-face interactions. One commented:
I probably make like a point of asking all the people that had all had babies at the same time if I’ve got a specific question… as supposed to going anywhere else.

Mothers reported a “little and often” approach to using websites to seek information, tending to rely on a small number of trusted sources and cross-referencing information between them; and utilising online forums to meet needs unmet offline, and when seeking broader experience or opinion from other mothers. However the issue of “judgement” arose. For example, one mother commented:

If you think it’s something … people might judge you on, then you feel more comfortable maybe asking your friend rather than putting it out there to everybody.

In relation, two other mothers discussed setting up their own Facebook group to share information and advice in response to witnessing friction and competition amongst mothers online, one commenting:

I’ve definitely noticed it on other pages. And people are like scared to like say stuff. We stated very clearly that on our page that we didn’t take kindly to bullying…people know that they’re not going to get judged.

Healthcare professionals (HPs) were considered important and useful, but not used very frequently. Mothers recognised HPs as sources of the “right” information, but also reported receiving conflicting information. Others felt that they had been patronised or had their concerns dismissed. One mother believed that doctors in particular could “talk down to people”, and described a mother at the clinic who was “practically in tears when she came out”. Another wished “folk like doctors” recognised that first-time mothers were not “paranoid”, but “just don’t know about stuff the first time”. Fear of judgement was again a contributing factor. Several mothers stated that they were uneasy asking HPs for “too much” or “certain” pieces of information, worrying that they would be viewed as over-protective. In such circumstances needs could be concealed. For example, one commented:

I think sometimes you’re a bit not sure of asking about things in case they think …oh, worried mother, or paranoid mother. And it makes you think, nah.

Such behaviours align with Chatman’s (1996) concepts of risk taking and secrecy, and issues of mistrust and concealment.

Librarians were not used and considered not important and not very useful. Of the 20 participants who provided information on frequency of visits to their local library, 6 visited on a weekly basis or more, 3 every few weeks, and 11 rarely or never. The majority reported never having sought parenting information from librarians, with several indicating that they visited libraries solely to attend Bookbug sessions (interactive group activity involving songs, stories and rhymes for babies and toddlers).

Mothers identified four main barriers to information seeking: lack of time and opportunity; conflicting information from different sources; requiring information about potentially contentious or sensitive topics; and lack of engagement with peers. When discussed with support workers, several felt that isolation was one of the most significant problems. One support worker commented that for many, engaging with support groups “might not be something that comes naturally to them”. The issue of isolation was also raised by the librarian, who felt that Bookbug sessions were beneficial for “mums who’ve felt a bit isolated… it becomes quite a social thing”, but acknowledged that some mothers just “don’t see it [the library] as a place for them to come to”.

Support workers also identified ‘territorial’ barriers with some mothers reluctant to access services in particular areas of their town, due to fear of intimidation and violence. ‘Psychological barriers’ were also identified, attributed to previous negative experiences with services and institutions, mental health issues, and feelings of helplessness. Lack of Internet access in impoverished circumstances
was also considered a significant barrier to information provision, with many National Health Service leaflets now directing mothers to online resources for further information.

The identified low level of library use was also discussed with support workers, with one support worker, concerned about issues of information overload from ‘obsessive’ internet searching, describing how she actively directed mothers to the local library, described as the “self-help library”. However in relation, the librarian reported that attempts to provide a “self-help” library collection of health material had been met with mixed success, commenting:

 I don’t think the majority of parents actually access information that way. They prefer a person-to-person kinda thing.

She perceived a need for a different approach to information provision for parents, and considered the community support group as an example from which the library service could learn. She believed that parents were expressing a desire for more information and support in a relaxed social setting, and had developed a programme of activities for the infants incorporating information provision for the parents similar to that of the community support group. She commented:

 Parents are quite comfortable in the library … they’ll not go and listen to a talk about Childsmile… but if it’s introduced into a [Bookbug] session we do here then they’re quite happy to come along.

Although these new sessions were still in development she believed they were proving successful so far, attributed to the fact they were presenting “validated” health information in a relaxed, neutral setting. However, she also discussed how difficult it was to reach mothers in other groups, describing them as “cliquey” and “hard to break into”.

Study two: young people aged 16-19 not in education, employment or training (NEET)

954,000 young people aged 16-24 in the UK (13.1% of all young people) are NEET (UK Office for National Statistics, 2014). Disadvantaged and disengaged, and unlikely to reengage without interventions (particularly those deemed ‘economically inactive’ (Office of National Statistics, 2014; Audit Commission, 2010)), key factors contributing to sustained NEET status (6 months+) include: economic hardship, poor social functioning, teenage pregnancy/parenthood, delinquency, low educational attainment, substance abuse, disability, carer responsibilities, and lack of parental support (O’Dea et al, 2014; Welsh Government Social Research, 2013; Dietrich, 2012; Audit Commission, 2010; Kieselbach, 2003). Low self-esteem is a significant issue, as is stigma, both contributing to social exclusion and negative behaviours (Miller et al, 2015; Yates & Payne, 2006; Kieselback, 2003). Delinquency rates are higher than peers, as is the prevalence of mental health issues (O’Dea et al, 2014; Audit Commission, 2010). The 2014 Princes Trust Annual Youth Index (Princes Trust, 2014), the largest UK youth study of its kind (2161 participants aged 16-25 (265 NEET)), reports that NEET youth are more than twice as likely as their peers to be prescribed anti-depressants, with 40% (n265) having experienced symptoms of mental illness as a direct result of their situation. Such issues are compounded by fatalistic opinions (Miller et al, 2015) and feelings of helplessness. The Princes Trust (2014) reports that 74% of NEETs stated that they would not ask for help even when struggling to cope, and that 72% felt that they had no one to confide in regardless.

Thirty-six NEET youth were observed attending drop-in sessions at three separate areas of multiple deprivations. Post-observation fifteen NEET youth were interviewed, and four took part in a focus group. Six support workers were also interviewed.

During observation the majority of NEET subjects exhibited non-motivated and passive information behaviours, and a dependency upon support workers when seeking and processing information. However, interactions between NEET youth and support workers could nonetheless be protracted and unproductive, with many subjects withdrawn, and appearing unable or reluctant to articulate or
discuss their needs. Such behavioural issues are not exclusive to NEET youth, for we know that adolescents in general are at a stage in their psychological development when they prioritise independence and are less receptive to information channels which they perceive to make them dependent on others (Coleman, 2010). Young people of NEET status are just as likely (as general population peers) to reject information sources that cause them to feel dependent, potentially more so when compounded by issues of low self-confidence and stigma (stigma being associated with NEET status (Yates & Payne, 2006), and stigma known to influence information practices (Lingel & Boyd, 2013)). Such behaviours align with Chatman’s (1996) concepts of risk taking and secrecy, and issues of mistrust and concealment.

During interviews six participants (40%) stated that they experienced no difficulties when looking for information, with a further four (27%) declining to comment. Five participants (33%) recounted difficulties variously attributed to literacy issues, difficulties in articulating information needs, and unmet information needs. That barriers were not identified or recounted by two thirds of participants is significant, and questionable. In related studies examining adolescent career/employment related information, and involving (student) participants who might be expected to experience less barriers, the number of participants who recounted experiencing barriers was higher, ranging from 55% (Webber and Zhu, 2007) to 70% (Julian, 1999). During observation we observed the majority of NEET youth experiencing difficulties with information processing tasks (many abandoned) and exhibiting a wide range of unmet information needs. Support worker interview comments reinforced our observations, and added to identified barriers: home life, isolation, institutional problems, literacy and access issues, motivation, and social skills. A possible explanation for our participant responses to this question is provided by Chatman (1996, p.197), who argues that when hindered from seeking information “…we engage in self-protective behaviours to keep others from sensing our need. These behaviours are meant to hide our true crisis in an effort to appear normal and to exhibit acceptable coping behaviours”. Triangulation of data suggests secrecy amongst those participants who declined to comment, and deception amongst those who stated that they experienced no difficulties; again aligning with two of Chatman’s (1996) key concepts.

Significant literacy issues (encompassing reading, computer, and information) were evident, exemplified by repeat observations of young people struggling with online searches, setting up accounts and completing forms, and processing information, and showing reluctance to take part in activities involving reading. Notably, the majority of the support workers stated that they would not direct a young person to find information independently, but would instead guide them to information sources. In relation, there was no evidence of proactive transitions to independent information seeking from either party, nor of basic literacy issues being explicitly addressed (although arguably falling out with the direct remit (and primary skills) of support workers). Remedial literacy education appears warranted for both immediate and long term needs (supporting OECD (2014) calls). In such circumstances public libraries (PL) could provide a key access and support role, but when asked if they used their local public library, eleven (73%) answered no. When asked why they did not use it, they variously answered that they were not interested or that there was nothing there for them. For example, one exclaimed “It’s rubbish! Rubbish isn’t the word I’d use but I don’t want to say the other one here”, while another asked if there even was a public library in the area (there are fourteen in South Ayrshire including one at each of the three sites of this study (and an additional mobile library service)). ‘I don’t read books’ was a recurrent theme. Another participant, who was also a young mother, commented:

I used to (use the library) before I had my kids... the kids are just too loud. No one wants to listen to them go ‘wah wah wah’ all the time. It’s a public library and everyone there... is so quiet.

Of the four interview participants (27%) who did use their public library, one did so for fiction reading, two for computer access, and one to borrow DVDs; none considered themselves to be regular users or could recollect a recent visit.
Post interviews a focus group incorporating a participatory exercise was conducted (placing identified information sources on a matrix according to perceived credibility (low-high) and frequency of use (low-high)). Support workers are used with high frequency and considered of high credibility, as is television news. The Internet is used with high frequency and considered to be of medium credibility. Family and friends are used with high frequency and considered of low credibility. Job Centre’s are used with medium frequency, and considered of high credibility, as are public transport companies. Newspapers are used with medium frequency and considered to be of low credibility. The SDS World of Work careers website is used with low frequency and considered of high credibility. Public libraries are used with low frequency and considered to be of medium credibility. In the accompanying discussion, libraries were not used because “I don’t like reading” and “I don’t read much”, and because “I’m not really good at reading”. Such narrow perceptions and negative opinions of libraries align with previous studies of general population adolescents (e.g. Agosto and Hughes-Hassell, 2005; Julien, 1999), and for our subjects, also with Chatman’s (1996) concept of situational relevance and proposition that an individual living in an impoverished state will fail to see external information sources as of direct and immediate value to lived experiences.

Study three: visually impaired people

The Royal National Institute for the Blind (RNIB, 2013) estimate that approximately two million people in the UK are visually impaired (VI). In Scotland alone, RNIB predict the number of VI Scots to double to 400,000 by 2031. RNIB report that VI people are three times more likely to experience depression than those without VI, and that almost half of the entire VI population feel isolated from people and events around them. Approximately two thirds of VI adults are not in employment.

An ongoing study, we report on preliminary findings from interviews with 6 VI adults and 1 support worker from within the Greater Glasgow area.

VI participants identified a number of common barriers experienced when seeking information: physical format (e.g. small text on medicine bottles, poor labelling on food packets), mainstream technologies difficult to use (e.g. touchscreens, websites), and interactions with information providers (e.g. staff misunderstanding VI capabilities, lack of staff training). The issue of literacy was also raised. One participant explained that VI people who had attended specialist schooling were more likely to have learned Braille, whereas those who attended mainstream schools or lost their sight later in life were not, and spoke of her frustration at the common presumption that she would be able to read Braille.

Again the public library can provide a key access and support role, but again take up was low. Although the majority of VI participants lived in an area with a specialist VI resource unit within their central library, only one had accessed the service. The majority of our VI participants appeared unaware that such a service existed; supporting previous findings of Creaser et al (2002) who reported that lack of knowledge of services available was a significant factor in their lack of adoption. One VI participant expressed her surprise that she had not heard about the library VI resource unit, as she described herself as an avid library user. Neither was she sure that her VI friends had heard of it, and questioning its usefulness based on previous experiences of local services, commenting:

The thing is they take these things way. If they’re not used, they don’t replace the equipment, and they don’t upgrade it.

Raising issues of isolation, the same VI participant discussed how she had had no contact with other VI people since leaving school, until obtaining a guide dog and became involved in new social circles. She felt that had she known about the VI resource unit in her central library, things might have been different:
If I’d had realised that there was places to go I would have probably gradually gone back to mixing with things because my eyes were deteriorating… because [having contact with others] is a huge support system.

Several VI participants raised issues with limited access to library collections. One participant, who had stopped visiting the library entirely, commented:

I haven’t taken books out the library for a long time… I used to though, but there’s kind genres of books I like reading they don’t come either in large print. You only find it’s the bestsellers that come in large print.

Another expressed their frustration at the way in which audio and large print books were often abridged, commenting ‘why should others choose what I get to read?’ The participant felt that their access to information had been ‘censored’ since their school days, providing a lack of sex education lessons delivered to sighted peers as an example. The participant concluded that:

You can either accept it, or fight to get what you want. I chose the latter, but many people don’t.

Such comments highlight the need for tenacity and persistence in VI information seeking behaviours. Willingness to ask for assistance when faced with a barrier was identified as another key factor. One VI participant spoke about reaching a point when they felt they could no longer ask more questions of a member of library staff:

Once you've asked a couple of questions you feel as if probably you've taken up enough time… and you just think, right, I'm not asking any more.

Another found it difficult to draw attention to poor service, commenting:

I’m very much aware of the fact that I would hate to be one of these people with a chip on my shoulder.

Issues of identity were a recurrent factor. Holt (2010) reports that disabled people can belong to a number of shifting, transient networks variously inclusive or exclusive, some formed around perceptions of shared identity, some not. Several of our participants used language to distance themselves from others with similar impairments. For example, one participant who did not like the idea if using the VI resource unit in the central library, described it as ‘the blind ghetto’. Another commented:

I’ve met other [VI] kids when I was younger, and the difference! I thought everyone would be like me.

Self-protective behaviours (secrecy and concealment) were also identified with the support worker describing one VI clients desire to live ‘like a sighted person’, and their delight when they can ‘pass’ as sighted rather than having to reveal a support need, as a not uncommon behaviour.

Independence was another closely related factor identified. Williamson et al (2000) concluded that independence in information seeking for VI people could be conceptualised as “the freedom to choose to rely on others, or use technology or other methods to access information”. From this perspective, meaningful interventions are not those which identify the ‘best’ way of facilitating access to information, but those which signpost a variety of paths for the VI to explore individually. Such interventions place importance on maintaining perceptions of independence in dependent situations. Ream (2003) describes how potentially marginalised individuals may risk being “unwitting recipients of a form of counterfeit social capital” (p. 237), as they are offered well-meaning, but “patronising” forms of support, which may ultimately harm their independence. In the current study, one
participant was very scathing about another VI individual who had been “mollycoddled” by their family and who “could just do nothing”.

**Conclusion**

Amongst our study groups, heightened access and internalised behavioural barriers are evident beyond those common to the general population, the former influenced by technology and literacy issues, the latter by social structures and norms; and consigning many of our subjects to a stratified existence within an impoverished (small) information world. There is evidence suggestive of deception, risk-taking, secrecy, and situational relevance in information behaviours, and a reliance on bonding social capital characteristically exclusive and inward facing. In such circumstances public libraries can provide a key information access and support role, and community role, but there is little evidence of their use. Findings suggest that a rethink is needed in how public libraries meet the information needs of people in disadvantaged and disengaged circumstances. We suggest that a more proactive outreach approach is needed that sensitively addresses issues of trust, confidence and self-efficacy. An action-oriented interdisciplinary approach (bringing together academia and practitioners) appears warranted to support such activity that importantly, focuses on evidence based interventions that influence information behaviours.

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**References**


