



**Stranger in a strange land; enabling information resilience
in resettlement landscapes.**

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Stranger in a strange land: enabling information resilience in resettlement landscapes?

Introduction

Resilience is an ability to bounce back in times of stress, and communities that have endured significant trauma or risk have been a focus of research in psychology, social welfare, and public health. Common among these studies is a view of resilience as being imbued with a type of 'stretchiness' that supports the ability to bounce back after adversity. There is also an emphasis on the subjective experience: on personal traits, emotional and institutional support, spirituality and religiosity. While a lack of information is often alluded to, missing from these studies are access to information or mastery of the information environment - critical activities and strategies that reduce uncertainty in time of transition.

In this paper, information and information access and use are brought to the forefront of an analysis of resilience. An information studies perspective is adopted to draw attention to, and emphasise, people's experience and use of information as a central tenet of its research interest. The paper highlights the resettlement practices of a group of refugees as they transition into a new setting and engage with new information environments: in particular, the health information environment. This perspective locates information and its operationalisation as focal points that act as a catalyst and underpins the emergence of resiliency. In times of adversity or uncertainty, having the capacity and ability to engage with, access, and use information i.e. to operationalize information literacy practice or to effectively work with information, should be viewed as a critical indicator of a person's resilience. It also is connected to the ability of a person to adapt and to transition through uncertainty. Information resilience is also associated with the ability to re-establish social capital that will furnish support in navigating a strange and unfamiliar land.

An information studies approach to resilience brings in perspectives from information literacy, information behaviour, information practice, and draws from concepts such as everyday spaces and information grounds. It is framed through socio-cultural and practice based theories (Bourdieu 1986; Lave and Wenger, 1991) to consider how refugees who arrive without established community networks bridge the transition of the resettlement process and establish new information landscapes that will allow them to operate within and learn in formal and informal spaces, along with the information affordances these spaces furnish. From this perspective, learning as an ongoing practice that involves the acquisition and transformation of information into new knowledge is context- driven; and, inextricably entwined with relationships, and identity formation that emerge from co- participation of practice (Billett, 2001; Lave and Wenger 1991).

When an information studies perspective is employed to explore the concept of resilience, a central theme becomes *learning how to go*, that is, in times of stress, or uncertainty people require information that will enable them to 'go on' to construct strategies that enable them to adapt and transform in order

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3 to meet the immediate and ongoing demands of everyday life or the significant demands created when
4 knowledge bases become disrupted.

5 Engaging with information and creating an understanding of the information environments and its
6 multiple landscapes occurs through interaction with, and exchange of, information. Developing
7 resiliency and becoming resilient is therefore predicated upon creating communal relationships with
8 others and their internal and external banks of knowledge, of sharing information and in turn
9 developing shared understanding and meanings.
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13 To emphasise an information studies approach, the term *information resilience* is adopted (Lloyd 2013;
14 2014) to highlight the central role that information, its use, and practices play in the resilience process.
15 The idea of resilience in information studies research was introduced to the field by Hersberger in 2010,
16 who briefly examined some key theoretical concepts drawn from psychology as an aid to helping
17 librarians understand how to 'better to serve users who have experienced stressful or adverse life
18 effects' (p. 1). The term has been extended in this paper and focuses on the information practices,
19 (strategies, activities, and skills) which guide peoples' capacity to adapt and transform in times of
20 adversity and uncertainty.
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26 This paper is exploratory and tentative. It will introduce a number of questions and explore some
27 concepts that may be used to guide an exploration of this emerging concept, for example:

- 28 • How has resilience been conceived in other areas?
- 29 • How is resilience understood from an information studies perspective?
- 30 • What concepts help frame an understanding of information resilience?
- 31 • What is information resilience?
- 32 • What role do libraries play in building and supporting strategies that enable resiliency? How
33 does the library act as a site of information resilience training?
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38 **How is resilience conceptualized?**

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40 The focus of early resilience research and still much of the focus today, centres on the negative effects
41 of adversity and the psychology of individual responses to adverse situations or conditions (Hutchinson
42 and Dorsett, 2012; Luthar, Cicchetti *et al.*, 2000; Masten and Wright, 2010). The locus of this research
43 is primarily focused on risk factors in relation to chronic illnesses in adults, and vulnerability in
44 relation to children (Pooley and Cohen, 2010, p. 30).
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48 There also appears to be no consensus on a definition of resilience, and this is largely due to whether
49 resilience is characterized as a process, or personal quality or trait. When resilience is viewed as a
50 personal quality or trait, a number of factors are identified that emphasise the affective aspects of
51 personal character, focusing on the optimism, personal strength, adaptability and perseverance (Ahern,
52 *et al.*, 2008; Hutchinson and Dorsett, 2012; Pooley and Cohen, 2010). As a process, resilience has
53 been defined more holistically to include the psychological, but also interaction between the
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3 'ecological context' and the person (Curtis and Cicchetti, 2007, p. 811). This is the approach taken in
4 this current paper.
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7 Resilience has also been considered as a positive outcome that can occur despite adversity or serious
8 threat. Mastern and Wright (2010) describe resilience as "an outcomes in spite of serious threats to
9 adaptation or development" (p. 228). Extending this concept of resilience as process and outcome,
10 Mastern and Wright (2010) view resilience as a process of interaction between people and changing
11 environments.
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14 The stretchiness of resilience has been described through the metaphor of a bouncing rubber ball
15 (Hegney, *et al.*, (2007) as the ability to bounce back. In their study of individuals in rural Queensland
16 these authors describe individual resilience as a rubber ball that will spring back into shape regardless
17 of the stress that is placed upon it. This metaphor is in keeping with the origin of the term, 'resilire'
18 which means to bounce back (Neaga, 2010).
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23 Luthar, *et al.*, (2000) suggest that two markers must be present in order to determine that someone is
24 demonstrating resilience or can be characterised as resilient. These markers are described as adversity,
25 which creates a negative situation or experience, and successful adaption or competence in relation to
26 tasks (p. 543). Continuing with the theme of adaption, Norris, *et al.*, (2008) have drawn from a wide
27 range of fields to present a theory of resilience which focuses on 'stress, adaption, wellness, and
28 resource dynamics' (p. 127). These authors consider resilience to be "a process linking a set of adaptive
29 capacity to a positive trajectory of functioning and adaption after a disturbance" (p. 130).
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34 An ecological approach has been advocated by Unger (2008, p. 225) who defined resilience:

35 *In the context of exposure to significant adversity, whether psychological, environmental or*
36 *both, resilience is both the capacity of the individual to navigate their way to health-*
37 *sustaining resources, including opportunities to experience feelings of well being, and a*
38 *condition of the individual family, community and culture to provide these health resources*
39 *and experience in culturally meaningful ways .*
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43 Pooley and Cohen (2010) build on this early work to accommodate recognition of context, and propose
44 the following definition: "The potential to exhibit resourcefulness by using available internal and
45 external resources in response to different contextual and developmental challenges" (p. 34). Resilience
46 is associated with the adaptability of learning and the ability to use learning to transform, while at the
47 same time continuing to function (Pooley and Cohen, 2010). Interestingly, while adversity is always
48 associated with significant challenges brought about by major disruptions (such as dispossession, war,
49 or significant social or physiological trauma) it may also refer to the challenges bought about by less
50 significant but still traumatic challenges such as those of losing a job or having to cope with rapid and
51 repeated workplace or organisational change.
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3 In the organisational science field the notion of organisational resilience has been applied to
4 descriptions of systems. In this domain, the concept is associated with the ability to rebound and move
5 forward in adverse organisational situations. Alternatively the term may also relate to the capacity to
6 develop new strategies and capabilities in order to take up new opportunities (Ponis and Koronis, 2012,
7 p. 923). As a result, two approaches exist in the organisational studies field (Frelasa and Burnett, 2013).
8 The first describes resilience as an ability to bounce back from a stressful and adverse situation, and to
9 regain control. The second approach suggests that resilience acts as a catalyst for change and focuses
10 on the new capabilities that may be developed (Ponis & Kronis (2012, p. 923). Frelas and Burnet
11 (2013) have indicated that while these approaches have produced a range of definitions, the common
12 theme in all is the notion of uncertainty. These authors draw attention to the work of Nonaka and
13 Takeuchi (1995, p. 5) who suggest that uncertainly produces periods of external knowledge
14 accumulation as a means of addressing the adverse situation. Frelas and Burnett (2013) working from a
15 knowledge management perspective have indicated that the organizational resilience literature “places
16 little explicit emphasis on the role of knowledge, and as such the relationships between organisational
17 resilience and the application of knowledge is within organisational context are still relatively ill-
18 defined” (p, 2013, p. 3)

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26 The concept of resilience is often closely aligned with studies of social inclusion, wellness and well
27 being often associated with specific socio-economic groups. Hutchinson and Dorsett (2012) have
28 explored the literature specifically related to refugees and resilience in Australia, but also drew from
29 international studies in order to supplement the paucity of literature in this area. These authors
30 identified themes, which contribute to a view of resilience, relating to: personal qualities, support,
31 religion and spirituality. Key barriers included language, racism, discrimination and labelling, which
32 emphasised the deficit models related to assumptions made about experience with trauma.

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36 In summary, the concept of resilience is closely associated with the ability to bounce back and adapt in
37 times of adversity. While the concept has been explored in the ecological, psychological, health, social
38 welfare, community and more recently business sectors - currently there is no agreement on a single
39 definition (Luthar, *et al.*, 2000; Pooley and Cohen 2010). However what is agreed upon is that
40 disruption is a significant indicator and while major trauma and distress are often viewed as the
41 common catalysts - this is not always case. Resilience may be influenced and built by a range of factors,
42 one of which, it is argued here, is access to information and the development of sound information
43 literacy practices

44 45 46 47 48 49 **Resilience in information studies literature**

50 In the library and information studies literature, the conceptualisation of resilience as an individual or
51 community construct is nascent and still emerging. However, as research in other fields suggests, a
52 primary resource for resilience is information. As such the concept should be of interest to researchers
53 and practitioners in this field, particularly as the concept has congruence with information literacy (as
54 outcome of information literacy practice). What is required is the development of a construct of
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3 information resilience and information resiliency that has resonance within the library and information
4 studies discourse and community.
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7 Introducing the concept into the library and information studies literature, Hersberger (2010) focused
8 on stress, homelessness and a role for public libraries. This author drew attention to how public and
9 virtual spaces created by libraries can contribute to a sense of place for people who are homeless,
10 abused or neglected.
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13 The idea of community resilience and the role of the public library has recently been explored by Grace
14 and Sen (2013). These authors report that 'there is no literature directly concerned with public libraries
15 promoting community resilience' (2013, p.514), which they suggest is a process 'comprising of
16 interrelated adaptive capacities' (p. 534) and concerned with the wider issue of the sustainability of
17 society (p. 518) . The autoethnographic study reported by these authors, focused on day-to-day
18 working practices and sought to understand how public libraries enable or constrain community
19 resilience. The study identified the disjuncture between the social worlds of library user and library
20 staff, the use of technology, the constraining effect of professional discourse on technology use, and,
21 the role of outreach as potential areas for policy development (p. 513).
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27 The relationship between information and resilience has recently been considered in relation to the
28 workplace by Lloyd (2013). Here it has been suggested that modern workplaces are information
29 intensive and characterised by the need for information to leverage a competitive edge, and by the
30 rapid implementation of technologies. This intensification requires staff who are information resilient
31 in times of rapid change with the ability and agility to adapt and change as the knowledge bases of their
32 workplace also change (Lloyd, 2013).
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36 **Becoming information resilient: *Learning to go on***

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38 A recently reported study of health literacy in resettling refugees (Lloyd, 2014) contributes to an
39 understanding of information resilience as it emerges in resettling refugees. This information landscape
40 study (Lloyd, 2014) focused on health information and health literacy and explored how resettling
41 refugees experienced entry and access to the health information environment.
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45 The study identified a number of major themes that serve to explain the association between
46 information practices and the construction of resilience. Resettlement was viewed as a transition that
47 was fraught with difficulty and uncertainty. A major theme emerging from the study described the
48 disruption of a person's knowledge base, requiring reorientation, adjusting and reframing. These
49 phases were simultaneously entwined with a need to construct new information landscapes and this, in
50 turn, required the recognition of affordances to access information and information sources and to
51 operationalize information skills that were appropriate and relevant to the new setting. It also required
52 the establishment of new strategies to deal with the complexity of established environments. These
53 major themes which have been described in detail in Lloyd (2014), are summarized below.
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Disruptions to the knowledge base: Reorienting, adjusting and reframing

The circumstances of uncontrolled displacement are experienced by participants in this study as a disruption to their existing knowledge bases, ways of knowing and an inability to recognise information affordances or ways of knowing how to access information. This disruption was made more complex for participants who had limited language and literacy capability. Transition impacts on people in a number of ways particularly in relation to the loss of reference points related to familial social relations, extended social networks, and cultural, social, institutional /organisational systems and how they operate (e.g. health, welfare, education). The disruption emerges as a loss of information that is inherent within these reference points. The transition to new environments is underscored by uncertainty (Kuhlthau, 1993) and there is a need to allay this situation by developing knowledge and skills that are appropriate and effective in the new information environments.

For the participants in the refugee health information study this disruption required them to:

- *reorient* –towards their new environments and in doing so begin to connect with and recognize the affordances that will fill in information gaps and reduce uncertainty;
- *adjust/modify* their previously established ways of knowing to accommodate this disruption; and
- *reframe* their knowledge in the context of their new environments (Lloyd, 2014)

Reconstructing disrupted landscapes.

A feature of resettlement is the disruption of knowledge and the need to establish new social relations and networks. In this respect, and in the context of the health information environment, resettling refugees' information resilience can be associated with the capacity to map the health information of their new setting, and to identify places and spaces that will afford practical and affective support. The activity of mapping enables newcomers to address specific needs and provides support needed to avoid information overload, which can often result in information avoidance (Johnson and Case, 2012).

In the refugee health information study, the health information landscape was composed of a number of nodes, which represent particular types of associations and social networks and pathways. Formal sites within the information landscape were classified as those with legislative or institutional capacity.

Service agencies that tender for refugee support services include: medical sites such as refugee clinics and counselling services, aid agencies and welfare support.

These sites represent a physical presence and enable access to institutional and compliance information that must be adhered as part of the resettlement contract. Other sites that constitute place in the landscape were identified as:

- *everyday sites* such as church groups, sporting teams, social groups, community meetings. For refugees in this study, these sites represented places where affinity groups were located. They also represent sites where incidental information, which differed from the purpose of the site could be obtained (e.g. health information offered in conversation after mass) ; and,

- *family sites* these sites were mapped as places of significant trust and authority.

Common to these sites was a range of media and information sources. These were identified as the Internet for the principle use of Facebook, email and web browsing e.g. Google. Other media that acted as a important sources of information included: television, newspapers, magazines, pamphlets and books. The static print based sources, were often considered more important because they gave participants with emerging literacy and language skills more time to comprehend the information; while 'Googling' was seen as a easy way to obtain information, this information was often printed off.

Dealing with disruption: Collective coping

A significant strategy that is central to resilience is that of collective coping which refers to the process of engaging with others in meaning, purposeful and culturally congruent ways (Kuo, 2012, p. 4). Participants in the study employed this strategy to deal with the *uncertainty* that new information environments present. Participants recognized the importance of socially mediated information and everyday spaces such as faith-based groups and community groups. Collective coping represented a joint activity where refugees, with limited knowledge of the new health environment worked together to *pool* fragmented information and combine limited literacies (information, digital and functional literacies) and skills to locate information, which would reduce uncertainty in relation to a health issue (Lloyd, 2014).

Pooling

Pooling of information describes collectivising *bits* of information from a wider range of sources in order to gain a more comprehensive picture. In the present study, pooling activity was associated with the incidental activity of everyday spaces and within family or community sites. Pooling occurred on two levels related to understanding *where information was located* and *how to access it*. Participants in the study were able to identify the types of information they need (where to get cheaper medicines, information that explains symptoms) and where to obtain sources of information from within the system (from the *internet, from TV, from the doctor*). However, difficulty in piecing that information together, comprehending the information, and understanding the meaning or consequence was also reported. To alleviate the stress created by knowledge disruptions and to solve particular problems this transition caused, participants reported sharing and piecing together information, to solve issues or problems. As a collecting-coping strategy, pooling could occur purposively, where people came to deliberately share information about a particular health issue, but it was also identified as occurring coincidentally in everyday spaces.

Situating a conception of information resilience in Library and Information Science (LIS).

Information resilience emerges from this research as a concept that enables LIS researchers to focus on the practices (activities and skills) and strategies that people must engage with to cope with the disruption of their knowledge base, and their need to re-establish information landscapes that reflect changed or altered situations and ways of knowing. While numerous definitions and descriptions of resilience are present in the broader literature, a key marker that appears to be missing from these is the

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3 identification of knowledge disruptions and the creation of knowledge gaps that are caused when
4 situations alter or significantly change e.g. because of trauma, or when adverse conditions prevail. This
5 disruption creates gaps in the information landscape and uncertainty that require the transition from
6 unknowing to knowing and rebuilding of cultural capitals to enable people to transition and build new
7 information landscapes. To further frame information resilience, the concept of social and cultural
8 capital building are introduced as a theoretical lens, because social relationships are often cited as a
9 catalyst for building social capital, but more importantly they are central to the resettlement experience
10 and act a catalyst for resilience (Bourdieu, 1986; Portes, 1998).
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15 The idea that people enter new landscapes in the resettlement transition has been identified by Lloyd, *et*
16 *al.*, (2013) and prior to this in relation to the workplace (Lloyd, 2006). The concept of an information
17 landscape lends itself as a metaphor and as an emerging methodology from which to explore
18 information resilience. The concept of uncertainty is also employed to emphasise the impact that a
19 disruption of knowledge creates when a new environment is entered and new information landscapes
20 are created.
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24 **Information landscapes**

25 The concept of information landscape (Lloyd 2006; 2010) as being constituted socially and constructed
26 within larger information environments is central to understanding the impact of knowledge disruption.
27 Information landscapes have both physical and metaphysical characteristics, which are entwined and
28 inseparable. Information landscapes are grounded by collaborative practices and maintained through
29 membership (e.g. affinity groups with similar interests or purposes or experiences). An information
30 landscape is constructed as people connect with physical and with the intersubjective places that are
31 created when people align and become affiliated with each other through membership. This
32 construction occurs through ongoing interaction between people who are engaged in similar
33 endeavours, pursuits and situations. Ways of knowing these landscapes are complex and rest upon
34 understanding how information is accessed and used (on one level) and how it is produced, reproduced,
35 circulated on another.
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42 **Constructing landscape**

43 Our constructions of information landscapes are at first tentative, we need to become familiar with the
44 larger information environment first and understand how it is shaped, what affordances it offers, we
45 must learn to operationalize the information practices and skills and we learn about what information is
46 legitimized. This information helps us to shape our specific information landscape. Landscapes act as
47 knowledge spaces (representing embodied ways of knowing). They are constructed through access to
48 social, textual and physical information modalities that are relevant to the practice, endeavour or
49 situation (Lloyd, 2006). This access is shaped by an array of socio-cultural, socio-material and
50 economic-political practices. Information landscapes can therefore be viewed as complex information
51 ecologies, which frame and situate particular discourses and narratives, thus entwine people within
52 time and place (Lloyd, 2006; 2010).
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4 The concept of information landscape is informed by an ecological view of information as
5 “any difference that makes a difference” (Bateson,1972, p. 453), and by affordances (Gibson,1977)
6 whereby people take up opportunities furnished by the setting. These opportunities are provided by the
7 landscape and are recognized through an understanding of what constitutes information and knowledge
8 in the particular setting.
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12 This view of landscape has resonance with Somerville’s work in *place* literacies because the creation
13 of an information landscape is intricately entwined with learning. Where place is understood to be
14 “both a specific local place and a metaphysical imaginary place” ...as an alternative lens through
15 which to construct knowledge about the world (2007, p. 149). For Somerville *place* is pedagogical “as
16 centres of experience places teach us about how the world works, and how our lives fit into the spaces
17 we occupy”(Somerville, 2007, p. 151).
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22 For example, when people enter a doctor’s office they enter a physical location, which is imbued with
23 meaning. When they enter into a relationship with their doctor they are entering into a space through
24 which intersubjective agreement about the meaning of their interaction is traded. Information and
25 knowledge at exchanged at both levels creating the information landscape. This information landscape
26 is socially constructed and emplaced within a larger health information environment, which is in turn
27 composed of a wide range of domain specific and structural knowledges.
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31 The health information landscape for example, may be centred on particular knowledge, e.g. diabetes,
32 chronic disease management and ways of knowing how to access this knowledge. It will have
33 spatio/temporal features locating it within time, e.g. in the context of a health information need, and
34 connect to spaces, such as the locations related to health, or the intersubjective spaces where people
35 agree upon health, e.g. discussions, conversations, narratives (Lloyd 2014).
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38 The concept of information landscape has the following elements:

- 39 • it is both a physical and metaphysical place but focused on a particular theme in
40 everyday life which are more complex e.g. health landscapes reflect the larger
41 information environment;
- 42 • it is constructed through engagement with different sites of knowledge and with
43 varied sources of information that are embodied, social and textual;
- 44 • its construction involves the recognition of varied sources and categories of
45 knowledge and the multiple connections, interconnections and saliences that make
46 knowledge possible and,
47 • information and knowledge are exchanged in ways that are complex, will often be
48 contested but are recognized as meaningful.
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53 When newcomers such as refugees enter a new information environment e.g. health, they may be
54 exposed to different knowledges (procedural, declarative, local, contingent) and ways of knowing that
55 differ from their established ways of knowing. This disjuncture, between established and new
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3 information environments results in a knowledge disruption or a gap, which in turn acts as a catalyst
4 for uncertainty and anxiety (Kuhlthau, 1993; 2004). Kuhlthau (2006) has tied information to the
5 reduction of uncertainty in her work on the search process and she suggests that "...people are likely to
6 experience heightened uncertainty in the face of unique, incompatible, inconsistent information that
7 requires construction and interpretation to be personally understood" (2006, p. 233). In the case of
8 refugees, uncertainty is the result of forced movement away from familiar places, people and
9 established ways of knowing that had formed part of their information landscape. This is also extended
10 into an inability to adequately gauge meaning and make sense of a new information environment
11 because of limited language and literacy competencies.
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16 **Rebuilding capital in the disrupted landscape**

17 The concept of social capital lends itself to understanding how information resilience emerges, because
18 the development of social relationships and networks is often cited as a central aspect of resiliency.

19 The idea that social capital represents the networks that build up around individuals has been explored
20 by Hope (2011, p. 94). Earlier, Bourdieu (1985; p. 248) defined social capital as " the aggregate of the
21 actual or potential resources, which are linked to possession of a durable network of more or less
22 institutionalized relationships of mutual acquaintance or recognition". From an information perspective
23 resources can be identified as information and knowledge about the nature, flow, and location of
24 information and the operationalization of information skills within a social system. The emphasis here
25 is on access to relationships and access to embodied capital, which can increase their cultural capital
26 (Bourdieu, 1985; Portes, 1998).
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31 Here the idea of bonding and bridging (Putnam, 2000) capital may also provide the explanatory power
32 that may contribute to understanding how information resilience is built. Refugees often arrive in new
33 countries without connections or the immediate support of social networks, and what connections that
34 they do have may be limited to the formal and institutionalized relationships with resettlement
35 agencies. They therefore lack social and cultural capital and must learn to create social relationships
36 with established and situated groups who will provide a bridge for them into the social setting and
37 allow them to develop bonds. Bridging capital refers to making connections with people who may not
38 be similar and identifying locations that help people to connect. While bonding capital refers to the
39 elements that bring people in groups closer together, e.g. same race, or religion, and establishes and
40 maintains networks (Putnam, 2000). Holland (2009, p. 340) suggests that while bonding capital helps
41 people to get by, bridging capital enables them to 'get on' . One of these elements is the development
42 of shared understandings and ways of knowing that come from agreement about what information and
43 knowledge are important and legitimate (Lloyd, 2010).
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50 To successfully connect with a new landscape, newcomers will need to operationalize ways of
51 knowing on two levels. The first focuses on the landscape's structure and on ways of knowing how the
52 structure is shaped, how to navigate within the landscape and how access to information is
53 operationalized - it is therefore epistemological in nature. At another level, people engage with situated
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3 knowledges of the landscape (the 'know why' knowledges). At this level they are engaging with the
4 ontological nature of the site, in this case knowledge related to health.

5 **Discussion: Information resilience**

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7 Researching resettlement from an information studies perspective emphasises the role of information
8 and people's experience of information and learning *how to go* in a new environment. The use of the
9 term *information resilience*, places emphasis on the central role that access and use of information
10 plays in enabling people to transition in times of uncertainty. While other fields recognise that there is a
11 need for information, research in these fields tend to focus on producing descriptions that highlight the
12 process or attributes of resilience. The result is the underlying catalyst- the need for information- and
13 response – the operationalization of skills that address the need- are still largely missing from the
14 literature.
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19 The resonance of information resilience as a researchable and an explanatory concept resides in its
20 ability to frame the outcome of people's engagement and experience of information when knowledge
21 bases are disrupted, and to frame the practices and literacies (information, digital, functional) that are
22 required in order reduce uncertainty. This approach brings the need for information to the forefront and
23 advocates a user centred perspective. While the concept is closely associated with adversity and risk,
24 these elements should be viewed along a trajectory from significant (uncertain about changes in the
25 workplace) to catastrophic (the need to obtain information during high risk events such as natural or
26 man made disasters).
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31 Central to the ability to overcome adversity and uncertainty is the capacity to understand how
32 information is situated and shaped with an environment, to recognize the affordances that will enable
33 access to information and to construct an information landscape that reflects the situated experience.
34 The ability to operationalize information skills to address challenges becomes part of this practice. The
35 idea of information resilience has congress with the concept of information literacy and while further
36 research is considered important, it may be tentatively described as a general outcome of information
37 literacy practice.
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42 The concept of social and cultural capital (Bourdieu, 1985) and the role of bridging and bonding capital
43 (Putnam, 2000) also present useful ways to focus research into information resilience and to address
44 questions about why and how information landscapes are constructed. The need to establish and
45 maintain social relationships is important to the building of social and cultural capital and results in the
46 need to access information that bonds people and groups together but also one that creates bridges to
47 new resources that will enable resilience to occur. In this context the role of pooling information
48 becomes a central theme to building resilient information practices where people's knowledge base has
49 become disrupted due to adversity or significant change.
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54 While the concept of information resilience is nascent in the LIS field, and further exploration is
55 required, the present study conceives information resilience an outcome of the ability to engage with
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3 information practices, and information tools and to operationalize these tools to transition through
4 knowledge disruption. While this current discussion has been located in health information
5 environment, it may be that the concept has salience in other sectors, particularly in relation to the
6 transition from education into work and the transitions that are required in rapidly changing workplaces.
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9 10 **Supporting information resilience and resiliency training: A key role for public** 11 **libraries**

12 The concept of information resilience provides a focal point to highlight what impact public libraries
13 play in supporting everyday learning needs of this specific cohort, or for other disadvantaged or
14 socially excluded groups identified by Hersberger (2010). Becoming information resilient requires a
15 safe supportive place to learn and to be allowed to make the mistakes that often occur when
16 learning. In this respect public libraries are uniquely placed, to meet the local demands of resettling
17 groups, by providing information, resources and training that are targeting groups and individuals who
18 are experiencing trauma or stress in resettlement. The present study indicates that one of these areas
19 relates to health information, at the source level, but more importantly supporting the development of
20 information literacy skills recognizing that information literacy occurs at an individual but also at a
21 collective level and both are required to promote information resilience.
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26 **Conclusion**

27 The increased movement of people across the globe has implications for all professions including
28 researchers and practitioners in the library and information science professions. Understanding the
29 implications of transition and resettlement from a perspective that inherently understands the role of
30 information (or lack of it) in people's lives put us in a unique position of being able to make a
31 significant contribution that can impact on the lives of people whose lives are now fraught with
32 uncertainty.
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37 In using the term information resilience, an attempt has been made to open a door to emphasise and
38 focus attention towards *information* as the central resource required to rebuild information landscapes,
39 and for rebuilding social and cultural capital, which enable resilience and support people in difficult
40 situations to learn *how to go on*. The health information landscape and health related information
41 practices of resettling refugees has been used to highlight this concept and to bring together a series of
42 sensitising concepts, which may focus further work in this emerging area.
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47 However, the scope of this concept should not be confined to a single area of LIS research and further
48 work is required across a range of different information landscapes to develop the a theory of
49 information resilience which may be used an analytical lens through which to explain people's
50 experience and use of information as they transition through times uncertainty and change.
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54 **References**

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