Our value as information professionals is often associated with the physical capital we provide, such as library space and collection. Yet our value also comes from the skills, knowledge and professional connections we share with others. Social capital refers to the resources received from knowing others. Those working in scholarly communication are in position to increase the social capital of our stakeholders by being visible, active members of their networks.

Different types of social capital provide different benefits and resources that enable action. Having ‘bridging’ social capital means you are loosely connected to a number of diverse people who can provide quick access to useful resources. Having ‘bonding’ social capital means you are deeply involved with one or more collectives that can enable change through shared customs, norms, vision and trust. By understanding the nature of the (virtual or in-person) relationships within our professional communities, we can identify varied needs and relevant mechanisms of change and support. By speaking in terms of enhancing forms of capital for stakeholders, we can more effectively communicate our purpose and value as key brokers in knowledge mobilization networks.

**Keywords**

social capital; intellectual capital; value; impact; stakeholder engagement; broker; networks

**Introduction**

Those involved in scholarly communication operate in an intricate, multi-stakeholder system. Many of the mechanisms used to achieve our goals, such as building connections, skills, trust, agreed norms and collaborations, require significant personal interactions. This role involves knowledge brokering within networks, which manifests in ‘exchanges of information and resources, as well as efforts at cooperation, coordination, and mutual assistance that foster utilization of available resources’. As brokers, we form links with people, serving as a conduit by which information can flow across network gaps. Through mapping relationships and resource flow we learn about issues associated with access, boundaries and knowledge mobilization. As Burt proposes, brokerage between groups provides a vision of options otherwise unseen, which is the mechanism for change and value creation by which brokerage becomes social capital.

**Social capital**

Capital refers to a type of resource that facilitates action. For example, having access to the physical capital of a library (space or collection) can help someone produce research or answer a question. Intellectual capital is more intangible, referring to the knowledge and knowing capability of a social collective. Intellectual capital consists of human capital (the skills and talents of people), structural capital (the supportive, non-physical infrastructure, processes and databases) and relational capital (the value derived through relationships).
Social capital refers to the physical, personal or psychosocial resources to which individuals and groups have access through their social networks. In essence, it is via relationships that resources can be recognized, mobilized and shared and through which change should be driven. Hermans and Thomas view social capital as the input and intellectual capital as the output (the produced value).

The seminal paper by Nahapiet and Ghoshal in 1998 identified three dimensions to social capital:

- structural dimension: the overall patterns of connections between people and the access to resources that these enable
- cognitive dimension: the resources that provide shared interpretations and meaning (such as language and shared narratives)
- relational dimension: the assets created and leveraged through relationships (trust, norms, identification, obligations and expectations).

Through these, social capital has the potential to increase efficiency of action and create value, including the creation of intellectual capital. They suggest that four conditions are required for the exchange and combination of resources to take place: the opportunity to access social knowledge must exist, these opportunities must be perceived as valuable, people must be motivated to engage and they must be capable of combining information. Enabling this knowledge capability is central to scholarly communication and therefore important to understand and articulate.

‘Bridging’ and ‘bonding’ social capital

The characteristics of networks may facilitate different effects and beneficial behaviours. A loose structure, with weaker types of relationship, is associated with ‘bridging’ social capital (by providing access to novel resources and information) and a tightly-knit structure, with close relationships in groups and communities with similar identities, can create ‘bonding’ social capital (by facilitating shared customs, norms, vision and trust). Both forms of social capital can contribute to the production, transfer and use of information.

Bridging social capital facilitates the flow of knowledge across professional and organizational boundaries. It is brought about through relationships with weak (loose) ties that connect otherwise socially disconnected people. Weak ties create efficient networks because they span structural holes, where messages fail to cross to others. Put simply, people with different backgrounds are likely to bring new ideas and perspectives. It is characterized by short distances between people in a network, where information can move rapidly and efficiently from one part of the network to another through a relatively small number of person-to-person interactions. Those with bridging social capital have access to new or novel ideas about how to address challenges when they arise.

Bonding social capital enables a strong sense of community and support. People within groups interact closely with each other and can develop shared respect, vision, language and norms. Knowing everyone in the group can also increase interpersonal trust, raise awareness of agreed standards and make deviation less likely. A close, bonded group, therefore, provides an environment conducive to action. For example, Neal and Neal suggest that bonding relationships mean that those implementing new innovation or practice will share similar perceptions to their network contacts, thus supporting the acceptability, appropriateness and adoption of new proposals.

Close relationships have many benefits but can also have disadvantages such as groupthink, intra-disciplinary bias, or reinforcement of negative norms. Negative effects are more likely to occur in closed groups where people may feel pressured or have excessive demands.
Although there may be good communication within groups, there is a risk of ‘closed loops’, where issues or ideas are kept within. This is particularly obvious when researchers publish their findings only for other researchers or when people seek advice only from within their communities. Also, it is common for people to move in and out of groups, so they need other sources of information during transitions.

Settings where individuals have bonding social capital from closely knit groups but also enjoy rapid access to information because of bridging links between these groups, can provide additional advantages. Networks with these characteristics are known as ‘small-world’ networks. These have been associated with creativity, problem solving and closing the research-practice gap.

Social capital in libraries and knowledge organizations

Social capital is a useful concept for those examining successful organizations and knowledge management, where it is recognized as enhancing the potential for individual and collective action in human social and organizational systems. In librarianship, social capital has been studied most often in public libraries. This research tends to focus on libraries as places for the public to gather and make social connections, which does not apply to all library or organizational settings. However, most information professionals are positioned to be actual or virtual gathering places for our own ‘communities’ of library users. We can therefore share the common goals of having a person-centred approach to strategy and enabling people to be an active part of their communities. Other relevant contexts for the study of social capital include school and academic libraries.

Examining social capital in our relationships does not have to be limited to library users. Lilly, for example, investigated the experience of social capital among solo (middle school) librarians. They recognized that connections with colleagues from their library network and professional organizations were vital to their practice. As technology enables more of us to work alone or in an isolated context, we may consider how we can contribute to the social capital of others in our profession. Indeed, Schlak suggests that ‘active managers and change agents in academic libraries require ample stocks of social capital in order to be effective’. For library leaders, cultivating relationships leads to mutual respect, trust, loyalty and emotional attachment with teams. Librarians should not shy away from tapping into the social capital we have generated through building reliable and trusted services and partnerships both within and outside the library.

Our position means that librarians and other information professionals have a significant role in enhancing the bridging and bonding social capital required for complex social processes such as knowledge mobilization. To do this effectively we need to examine what this means in our own contexts.

Case study

The HRB National Drugs Library was set up as a single source of problem substance use research for those working in this area in Ireland. Increasing demands and opportunities mean we need to understand the most effective use of our resources and have a clear strategy to guide our actions. Like all information professionals, we are also interested in the use and impact of the services we provide. Our goal is to enable evidence-informed decision-making (EIDM), indicated by library users using research evidence in their work or education. The challenge, therefore, was to identify interventions (resources and services) that could help us achieve this goal.

Based on our own knowledge, previous library research and evidence from stakeholders (for example, surveys of students about their sources of evidence), we noted possible strong or weak ties within our network. We have many library users with whom we connect directly...
through weak ties and there are closely-knit groups with whom we connect through strong, close ties. We are also in a position to connect different groups (across short paths) leading to small-world networks. One example is to enhance our role as broker between student groups and our organization’s researchers by bringing them together in workshops.

Using our collected resources, including mechanisms from the conceptual framework in The science of using science, we developed a social capital change model (based on theory of change) that could contribute to a person-focused strategy. We started with our aim of enabling EIDM and reflected on how this could be achieved by focusing on components of social capital. Using Nahapiet and Ghoshal’s proposition that social capital influences the conditions for resource exchange and combination (which match behaviour change conditions: opportunity, motivation and capability), we noted potential mechanisms, our assumptions and proposed actions (appendix A). Some examples of activities are presented next.

**Enhancing bridging social capital**

We want to engage in active communication that provides fast, easy access to relevant, quality resources for all stakeholders located across our network. This requires brokering connections between otherwise unconnected individuals and groups to enhance their bridging social capital. Online and social media were identified as effective methods of communication.

Social media provide the tools to bridge gaps or disconnections in less dense areas of our networks. Microblogging sites (like Twitter) are associated with bridging social capital. We can nurture weak ties through targeted messages and following (connecting with) others from whom we can obtain resources. Tagging relevant followers in Tweets increases interactions and the spread of information, so to effectively utilize these ties we created subject-based tag lists of key influencers. Now, when adding a new publication to our collection, we can quickly notify those who are interested in that subject area. By paying attention to our social media network, we too receive notifications of new publications from those key influencers, creating mutually beneficial relationships. These online bridging relationships should enhance our reputation as brokers who can mobilize knowledge across boundaries.

**Enhancing bonding social capital**

Sharing ideas and resources is just one element of knowledge mobilization. Helping to develop a culture where people use research evidence in decision-making requires deep, sustained interventions involving social influence to reinforce and motivate behaviour change. Some information professionals (such as embedded librarians in clinical or research teams) are already positioned within stakeholder groups. We wanted to consider how we could enhance this aspect of our role and enable cultures of knowledge where groups learn, share and produce knowledge. We identified key leaders in our target areas of research, education, policy and healthcare practice. By strengthening and deepening relations with these people we are developing a greater understanding of appropriate language and adopting this into our classification system and website to improve functionality. These bonds also ensure we can easily adapt to new trends and issues that are important to stakeholders.

Facilitating and taking an active part in groups was identified as a useful way to build trust, shared identity, expectation and norms. We therefore organized a new community of practice for a subject of interest to health and social care practitioners. Meetings bring challenges (largely of motivation) but also a reciprocal learning experience we could not hope to achieve through brief interaction. By gathering and exchanging ideas, members can also enhance the social capital of one another. We now view our inclusion in
groups as a means of enhancing social capital for all involved, and plan to identify more opportunities to work within and between groups to enhance our small-world networks.

**Determining social capital**

Directly measuring an intangible concept is difficult. Determinants are factors that have an impact on social interactions and therefore allow social capital to come about. Manifestations are the outcomes of social capital. Proposed indicators for measuring bonding social capital capture information on a group’s or network’s personal relations, its structure and functioning (e.g. meeting frequency, hierarchy), its social climate (e.g. trust, reciprocity) and its identity (e.g. shared values, goals). In addition, we can describe the manifestations that are generated for individuals or groups, such as knowledge resources, advocacy and power. Bridging social capital may be determined, for example, by establishing an information professional as a direct, key source of access to professional information. Examining the importance of our role as resource provider (generator) for stakeholders is a promising starting point. For example, a questionnaire examining relationships and information-seeking behaviour (who people know that can: provide access to research evidence, give advice about information sources, help find answers to professional queries, etc.) would provide a better picture of stakeholder social capital in our networks.

**Process limitations**

Our desk research on the concepts of EIDM and social capital has given us an understanding of the mechanisms and interventions that may be effective in reaching our goals – and our discussions, analysis and change model have provided tools for a strategic plan. However, we recognize several limitations in our process. Our brief network analysis, although grounded on significant professional knowledge, is largely based on hypothetical data and assumptions. Other relationships that provide research evidence are likely to be underestimated. Direct, comprehensive stakeholder input, through surveys or interviews with library users, would provide more accurate details which could be reassessed in a post-intervention evaluation. These factors could be incorporated into future research.

**Key learning**

Although we are in the early stages of identifying mechanisms that enable social capital and EIDM, which have yet to be evaluated in our context, we have found some elements to be particularly useful in developing a strategy. In particular, identifying evidence-based mechanisms and interventions is an iterative process requiring a good understanding of stakeholders. Recognizing key people, the types of connections involved in our networks and how we can position ourselves to enable bridging and bonding social capital for our stakeholders, helps us demonstrate the flow of knowledge in our context. We have a role in shortening the chain in the journey of messages by identifying audiences to actively disseminate research.

Both types of social capital are required if we want a role that provides fast access to new knowledge and impacts policy and practice through participation in more closed environments that influence meaningful change. For example, it is valuable not only to connect journal clubs, communities of practice and committees with external sources of new information and ideas, but also to be active, immersed members within these groups. By bringing library users together we create an environment that enables co-produced research and implementation of knowledge in a way that is unlikely to happen in a simple push-pull model of knowledge transfer. Building networks that enhance social capital can bring together people who would not otherwise interact.

Increasing the social capital of our stakeholders enables us to capture and articulate the value we provide through our collected resources as well as the value we provide through our professional knowledge and connections, which is so often missing from discussions.
Conclusions

Those involved in scholarly communication operate with ever-expanding information resources. But it is people who provide, find, interpret and use these resources, so we also need to mobilize the value inherent in our professional networks. There is a saying, ‘it’s not what you know but who you know that matters’. This is the essence of social capital: the value received from knowing others.

Understanding the nature of our relationships enables us to identify our place within networks. We can then see who is in and out of our scope, who benefits and ought to benefit and how these exclusions affect our ability to achieve our goals. Speaking in terms of enhancing forms of capital for stakeholders helps us to articulate our value and impact by framing our purpose and demonstrating our value as key brokers in knowledge mobilization networks.

Librarians and other information professionals are in a key position to increase the social capital of others. Most of us will have impact by simply ensuring we are a visible and useful part of our stakeholders’ networks. We also have the potential to develop close relationships within various groups and communities. This provides an environment conducive to building shared norms, vision, identity and language, thus influencing change and progress. Ideally, we should all aim to create small-world networks with the benefits of both bridging and bonding social capital, so we may meet the diverse needs of those with whom we work. The reciprocal benefits are worth the investment of our time and effort.

Supplemental File
The supplemental file for this article can be found as follows:

- Appendix A. Social capital change model. DOI: https://doi.org/10.1629/uksg.530.s1

Abbreviations and Acronyms
A list of the abbreviations and acronyms used in this and other Insights articles can be accessed here – click on the URL below and then select the ‘full list of industry A&As’ link: http://www.uksg.org/publications#aa

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The author has declared no competing interests.

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