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Supporting Evidence-Informed Practice in Human Service Organizations: An Exploratory Study of Link Officers

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ABSTRACT

Human service organizations seeking to infuse research and other forms of evidence into their programs often need to expand their knowledge sharing systems in order to build their absorptive capacities for new information. To promote their engagement in evidence-informed practice, human service organizations can benefit from connections with intermediary organizations that assist with the dissemination and utilization of research and the use of internal knowledge brokers, called *link officers*. These boundary-spanning individuals work to embed external research and internal evidence in order to address current organizational priorities and service demands. This exploratory study describes the characteristics, major activities, and perceptions of link officers connected with three pioneering intermediary organizations. Quantitative and qualitative data from a survey of 137 Canadian and UK link officers provide a profile of these professionals, including how they engage practitioners to promote evidence-informed practice and the degree to which they are supported within their organizations and by intermediary organizations. The article concludes with practice and research implications for the development of the link officer role in human service organizations.

KEYWORDS

Boundary spanning; evidence-informed practice; human service organizations; knowledge broker; knowledge translation

Human service organizations (HSOs) are increasingly seeking to develop knowledge-sharing systems to support evidence-informed practice (EIP). Recent literature has highlighted the “communication link” or purveyor role as key to the process of connecting research to practice (Bornbaum, Kornas, Peirson, & Rosella, 2015; Damschroder et al., 2009; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Pioneering research, as reflected in the work of Havelock (1967), suggests that “any detailed consideration of the dissemination and utilization of knowledge must sooner or later focus on the question of linking roles” (p. 1).

Anthony and Austin (2008) note that a type of management support organization, also known as intermediary organizations (IOs), can serve as one such link to build individual, relational, and organizational research capacities in HSOs by connecting research with practice. Another approach to the development of knowledge-sharing systems involves *link officers* who connect their organization’s high priority interests with external research in order to promote evidence-informed practice. This exploratory study of link officers draws upon the experiences of three pioneering IOs that seek to develop and sustain intra- and interorganizational knowledge-sharing systems among HSOs in Ontario, Canada, and the United Kingdom.

Based on a review of relevant literature on boundary-spanning positions within organizations and the characteristics of those who occupy such positions, this study focuses on knowledge brokering roles in HSOs called link officers and link PARTners and their location between their employing

agency and one of the three IOs. The study draws upon an online survey of 137 Canadian and UK link officers designed to develop a profile of these professionals, how they promote evidence-informed practice, and the nature of organizational support inside and outside their HSOs. The implications for human service management and continuing investigation are noted in the discussion section.

Link officers as boundary-spanning–knowledge brokers

The origins of the link officer concept can be traced in the United Kingdom to government policies designed to encourage responses to citizen concerns (e.g., law enforcement liaisons with the community or school liaisons responding to the needs of families). The historical function of link officers is to represent the interests of their organizations in their contacts with external stakeholders and to relay relevant information back to organizational leaders for enhanced decision making.

Given their unique ability to connect colleagues to new information and facilitate communication, link officers are in a position to connect stakeholder groups inside and outside of HSOs; for example, a link officer can help to address the barriers experienced by practitioners seeking to engage in evidence-informed practice. These barriers include bureaucratic or rigid organizational structures, organizational cultures and climates that are resistant to research and experimentation, and/or the lack of time and fiscal resources needed for staff training for implementing evidence-informed practice (McBeath & Austin, 2015). In this era of increasing accountability for social services, there has been an ongoing search for ways to model evidence-informed practice, create learning environments, construct knowledge-sharing communities, and promote a culture of ongoing practice improvement to support the capacities of practitioners to integrate research and practice (Austin, Dal Santo, & Lee, 2012; Gray, 2009; Plath, 2014; Raffel, Lee, Dougherty, & Greene, 2013). Some of the knowledge brokering tasks needed to strengthen the development of learning organizations include the capacity to (1) identify, evaluate, and translate research for use in different practice settings (Jackson-Bowers, Kalucy, & McIntyre, 2006; Lomas, 2007; Meyer, 2010; Waring, Currie, Crompton, & Bishop, 2013); (2) apply relevant research to specific practice settings (Jackson-Bowers et al., 2006; Kramer, Cole, & Leithwood, 2004; Lomas, 2007; Meyer, 2010; Waring et al., 2013); (3) build research-focused relationships between practitioners and researchers (Jackson-Bowers et al., 2006; Lomas, 2007); (4) build the research capacity of staff (Meyer, 2010; Rivard et al., 2010; Traynor, DeCorby, & Dobbins, 2014); and (5) manage research resources and data (Jackson-Bowers et al., 2006).

From a classical organizational behavior perspective, knowledge-brokering link officers can be understood as boundary spanners whose role is situated specifically at the intersection of organizational subunits, or between the organization and its external environment, for the purpose of sharing knowledge and supporting organizational innovation (Tushman, 1977). Within each organization, specific norms and values evolve to reflect the distinct needs and culture of the organization that can impede the flow of information across different organizational settings (Katz & Kahn, 1978; March & Simon, 1993). As argued by Tushman and Scanlan (1981a), “Boundaries can be spanned effectively only by individuals who . . . are attuned to the contextual information on both sides of the boundary, enabling them to search out relevant information on one side and disseminate it on the other” (p. 291). Tushman and Scanlan (1981b) distinguish between individuals with the responsibility of communicating across primarily internal boundaries (i.e., *within-organization boundary spanners*), individuals with external communication responsibilities for only spanning external boundaries (i.e., *interorganizational boundary spanners*), and individuals who access external information and disseminate that information within the organization *and* share intra-organizational information with external entities (*bidirectional boundary spanners*).

Early studies of internal boundary-spanning roles focused on the relationship between the primary functions of the organization and the resources needed for boundary spanning to be carried out effectively and efficiently. In organizations concerned with discrete tasks and predictable

outcomes (e.g., manufacturing), boundary-spanning roles may require little time commitment or training and are often situated in formal positions of authority (Frost & Whitley, 1971; Pettigrew, 1972; Whitley & Frost, 1973). In contrast, more-complex organizations with less predictable or repetitious functions (e.g., medicine) may call for a boundary-spanning role that is (1) able to span organizational hierarchies and represent the perspectives of multiple organizational stakeholders as opposed to only administrative elites, (2) more likely to require significant organizational supports (e.g., time dedicated to information processing and disseminating, additional staff resources, access to internal and external networks for information sharing) and (3) more likely to need advanced education/training and continuing professional development (Farris, 1972; Tushman, 1977).

Health care studies of boundary spanners in knowledge brokering roles have emphasized the interpersonal dimensions with an focus on the value of trust, interpersonal relationships, and informal leadership as facilitators of linkage efforts (Bornbaum et al., 2015; Williams, 2002). Other research features the importance of boundary spanners being perceived by peers as credible and skilled but note the possibility that being in senior organizational roles may hinder their effectiveness (Waring et al., 2013). Studies have also suggested that a combination of personal qualities, group characteristics, and formal and informal organizational supports are needed to sustain the linkage role (Chew, Armstrong, & Martin, 2013; Currie & White, 2013; Long, Cunningham, & Braithwaite, 2013).

Based on the current literature, the concepts of task complexity and resource allocation are critical to understanding the bidirectional nature of boundary spanning that underlies the link officer role in HSOs. First, task complexity in the human services calls for boundary spanners to be highly educated and experienced practitioners who do not necessarily need to be in formal positions of authority but need to be well connected within and outside the organization to be viewed as credible by colleagues and a valuable source of external information and new ideas (Conklin, Lusk, Harris, & Stolee, 2013; Tushman & Scanlan, 1981b; Waring et al., 2013). The second concept relates to resource allocation where HSO leaders are called upon to support the boundary-spanning efforts of link officers by providing sufficient time and resources for them to build or access the professional networks needed to facilitate effective information exchange inside and outside the organization (Chew et al., 2013; Tushman, 1977; Tushman & Scanlan, 1981b).

Another factor that impacts the knowledge-brokering process is the role of intermediary organizations (IOs) designed to expand the capacity of individual HSOs by providing consultative assistance to managers and supporting organizational infrastructure development, particularly for small, start-up organizations. The literature on IOs in the human services has focused on their connections to academic institutions (Austin et al., 1999). In a similar way, the literature on intermediary management service organizations features their importance for supporting the development and sustainability of community collaborations (Connor, Kadel-Taras, & Vinokur-Kaplan, 1999), and their role in supporting fledgling nonprofits in multiorganization nonprofit centers (Vinokur-Kaplan & McBeath, 2014). In contrast, little research has focused on how IOs help transfer knowledge to HSOs despite the existence of a literature on the role of IOs in other sectors such as education (Cooper, 2014). In particular, there has been little attention to IOs that seek to facilitate the transfer of knowledge from researchers to practitioners in social service settings; nor has there been much investigation of the strategies that human service IOs use to support evidence-informed practice among their partner organizations.

The current study

This study focuses on three IOs that support themselves with membership dues and project grants: (1) Practice and Research Together (PART) in Ontario, Canada, and (2) Research in Practice (RiP) and (3) Research in Practice for Adults (RiPfA) in the United Kingdom. Prior to this study, the research team had no affiliation or relationship with PART, RiP, or RiPfA. RiP was established in 1996 with the purpose of helping to embed evidence into the daily practice of child-welfare

organizations (Dill & Shera, 2015). The success of this organization prompted the creation in 2005 of a sister organization, RiPfa, which focuses on promoting the use of evidence in adult social and protective services. RiP and RiPfa operate as knowledge repositories, knowledge translators, and knowledge transfer experts that operate to identify, distill, and disseminate relevant research in audience-specific formats. They also seek to enhance the research absorptive capacities of member organizations by providing organizational support through the development of collaborative inter-organizational networks. Their respective missions are to bring together research, practitioner expertise, and client voice, and to support practitioners, managers, and leaders in order to embed research and evidence into the design, development, and delivery of adult and children's services.

Inspired by the success of RiP and RiPfa in the United Kingdom, PART was established with the support of RiP in Ontario, Canada, in 2006 (Shera & Dill, 2012). Though smaller in size than RiP and RiPfa, PART has a similar mission of identifying, synthesizing, and translating relevant research into accessible, usable informational resources, primarily for use by members, which includes nonprofit child-welfare organizations.

PART and RiP/RiPfa promote evidence-informed practice within membership networks by providing an extensive array of professional development resources using publications, workshops, webinars, organizational support and consultation, and online tools and guides to help members locate, access, and evaluate research. Each organization relies on its member HSOs to designate a specific staff member—called a Link PARTner (LP) by PART and a Link Officer (LO) in RiP and RiPfa—to help the member organization maximize the value of their membership by serving as a liaison for disseminating evidence and learning opportunities throughout their respective human service organizations. LPs and LOs thus function as critical boundary spanners between their employing HSO and the IO.

These three IOs view the role of LPs and LOs as critical to their mission: they are the conduit for sharing resources with staff and practitioners in member HSOs, and they connect these staff to the range of resources offered by each IO. Each IO trains LPs and LOs on the nature of evidence-informed practice, on the target audiences for each of the IO's resources, on how to access those resources that include events and workshops, and on how to monitor membership usage. In order to maintain the relevance of their resources, the organizations regularly solicit input from their LOs and LPs. For example, PART annually gathers the perceptions of its LPs regarding current challenges in practice in order to develop programs as well as locate relevant research, often published as PARTicles. Similarly, RiP and RiPfa identify local and national topics for their learning program in consultation with LOs to ensure that they address current policy priorities and local organizational needs.

While the IO membership agreements do not refer specifically to the link officer role, written descriptions of the role that include recommendations about the type of staff best suited to the role are provided to new members. In the case of RiP and RiPfa, this informational bulletin states, *"It is usual for Link Officers to be situated in roles where they have a good overview of the needs of an organisation and are able to exercise their enthusiasm for research. Link Officers need to have very good links with workforce development, though they need not be sited there. An understanding of practice issues is very important."* The bulletin also includes tips and techniques for Link Officers to use in carrying out the role and provides strategies for providing organizational support for the role.

Once an LP or LO has been appointed, he or she receives coaching and advice about the new role from IO account managers, orientations by prior LPs or LOs in their organization, and formal training and networking events offered by the IOs, including one or more annual meetings for LPs/LOs and regional meetings. In the context of ongoing IO support, the training events include descriptions of the primary functions of their role as (1) a conduit between their organization and IOs, (2) a source of information regarding current practice concerns in their organizations, and (3) champions of evidence-informed practice in their organizations and in their professional sectors. Training content includes educating LPs and LOs about evidence-informed practice—what it is and

why it is important—and logistics about how to connect staff in their organizations with IO resources including web-based resources and learning events. Further, RiP/RiPfA requires that membership account managers meet regularly with the LOs in their region—every 4 to 6 weeks—usually via telephone. PART offers quarterly online meetings between PART staff and LPs.

While the history and organizational strategies employed by these three IOs have been captured by previous studies (Dill & Shera, 2015; Shera & Dill, 2012), little is known about the mission-critical role of Link Officers and Link PARTners. The current study sought to increase understanding of the role of LPs and LOs and of the current perceptions of LOs/LPs in supporting evidence-informed practice within their HSOs. The primary research questions included the following: (1) What are the professional characteristics of individuals serving in a LP/LO role? (2) What do LPs/LOs understand their role to entail and what major activities are involved in fulfilling those responsibilities? and (3) How well are the professional efforts of LPs/LOs supported by their own organizations and their IOs?

Study methodology

In late 2014, current and former LPs were invited to participate in a brief online survey focused on understanding the LP role. The survey invited both current and former LPs in order to broaden the sample size and capture reasons for former LPs leaving the role. The survey was developed with input from IOs to ensure that survey questions were relevant to LPs and LOs. The survey involved a mixture of closed-ended questions (either categorical questions or Likert-type questions) and short, open-ended questions organized into the following domains of inquiry: respondent characteristics; approaches to evidence-informed practice; understanding of the LP role and major activities; and perceptions of the organizational environment for evidence-informed practice and in support of the LP role. Respondents were asked to specify the extent to which they were involved in five types of evidence integration and promotion activities as part of their LP role, through a series of five-point Likert scales, and were given the opportunity to describe useful strategies and approaches to their LP role through open-ended, short-answer questions. The survey link was distributed electronically by PART to 93 LPs in Canadian child-welfare and family service agencies, representing 64 current LPs and 29 former LPs.

To expand this investigation, the survey was distributed by RiP/RiPfA to 198 current LOs in United Kingdom child and adult welfare agencies in early 2015, after adjusting the wording of several survey questions to suit the local HSO context. A link to the survey was also included in an e-bulletin that may have been forwarded by recipients to other potential respondents, including former LOs. The overall study was administered under the human subjects protections of the institutional review board of the University of California, Berkeley.

Of the 98 potential LPs connected to PART, 70 respondents completed the survey, for a response rate of 71.4% (57 current LPs, 20 former LPs, and 3 unidentified). Of the 198 potential LOs connected to RiP/RiPfA, 67 respondents completed the survey, for a response rate of 33.8% (65 current and 2 former LOs). However, because the UK survey was sent to a potentially greater number of respondents through e-bulletin forwards, a definitive response rate is unknown. The combined response rate was 46.2%.

Analysis

Descriptive statistical analyses of the survey data were conducted using the responses to the closed-ended questions. Analysis of continuous measures (e.g., years in current organizational position, FTE dedicated to the LP/LO role) and Likert-type measures involved the calculation of means and standard deviations; percentages were calculated for categorical measures. The analyses utilized Stata 13.0.

The qualitative data from the open-ended survey questions were uploaded into Dedoose, a cloud-based qualitative analysis software program. Analysis involved multiple coding cycles in which inductive coding schemes were developed that included descriptive and focused coding (Miles, Huberman, & Saldaña, 2013; Saldaña, 2013). Initial qualitative analysis began with the LP data. The first coding cycle was completed by coding all responses from one question at a time by capturing response content or themes within responses. A similar process was used for coding the LO data from the United Kingdom.

For the second round of coding, the qualitative data from the LP and LO surveys were combined, and analysis focused primarily on understanding LP/LO activities and perceptions of organizational support. The code list was refined by collapsing similar codes, removing nonessential codes, and reordering and reorganizing remaining codes. A third and final round of coding was conducted in which a few codes were identified for more detailed analysis, including the use of subcodes. In reporting findings, code counts and co-occurrences were used to identify the density of specific LO and LP activities and levels of perceived organizational support.

Findings

Demographic characteristics of LPs/LOs

The majority of Canadian LPs were located in public child-welfare organizations ($n = 48$; 72%), with approximately a fifth of LPs located in organizations providing child welfare and child-mental-health services ($n = 13$, 19%). Six respondents (9%) were located in other HSO settings (e.g., an advocacy organization, a child-welfare-education organization, an agency providing child-welfare services in combination with a variety of other human services). Most British LOs were located in public-sector, local authority organizations ($n = 58$; 95%) dedicated to protecting and promoting the welfare of the children, adults, and families within a specific public jurisdiction. Three LOs (5%) worked in nonprofits.

As Table 1 illustrates, the majority of LPs and LOs were experienced, well-educated professionals who held middle-management positions that included a moderate level of organizational authority. These positions included quality assurance, staff development or program supervision (e.g., 3 to 4 staff) and reported directly to senior managers or directors. When asked to describe their job responsibilities outside of their role as a Link PARTner, most Canadian survey participants described overseeing a team of direct service practitioners or a staff development team where they functioned as middle managers or upper-level administrators. These administrative positions included such tasks as staffing and managing a team of direct service staff, engaging in strategic planning, managing budgets, developing and implementing agency policies, serving on community or organizational committees, and managing internal and external communications. Several UK respondents reported overseeing staff development and/or quality assurance (e.g., internal program or service evaluation and managing and interpreting agency data for quality-control purposes). Staff development managers (sometimes called practice development managers) described creating and delivering internal training, assessing training needs, planning training events, coordinating external training, and fostering committee or workgroup participation. A few notable UK participants described themselves as “lead practitioners” who consulted on complex cases, supervised other direct-service practitioners, and shared best practice resources.

Understanding of LP/LO role and activities

Many respondents described their role as a “conduit” or “catalyst” to promote and facilitate the use of research in practice by increasing an awareness of and access to research resources provided by their IOs. As illustrated in Table 2, LOs and LPs dedicated an average of 1.4 hours per week to the LP/LO role. In the previous month, they had reviewed an average of 5.3 research articles, chapters,

Table 1. Characteristics of Link Officers (LOs) and Link PARTners (LPs).

	LO	LP	Total
Tenure in Link role	Mean (SD)	Mean (SD)	Mean (SD)
Current LO/LP - Years in role	2.93 (2.8)	2.6 (2.1)	2.8 (2.5)
Past LO/LP - How long ago LP/LO?	0.5 (0.0)	2 (1.0)	1.8 (1.0)
Past LO/LP - Years in role	2.5 (2.1)	3.4 (1.8)	3.3 (1.8)
Experience in formal role			
Number of supervisees	2.8 (5.8)	4.3 (3.7)	3.6 (4.9)
Years in organizations	11.2 (7.6)	12.7 (8.0)	12 (7.8)
Years in position	4.7 (4.5)	5.4 (4.6)	5.1 (4.5)
Years in social services	14.2 (9.4)	19.4 (8.3)	16.9 (9.2)
Path to the Link role	Percentage	Percentage	Percentage
Volunteered for the position	31%	31%	25%
Recommended for the position	22%	22%	15%
Assigned to the position	52%	52%	58%
Other	3%	3%	2%
Education level			
High school diploma/A Levels	0%	0%	0%
College diploma	8%	7%	11%
BSW degree	24%	13%	25%
Other Bachelor degree	29%	9%	25%
MSW	15%	46%	43%
Other Master's degree	24%	19%	29%
Ph.D. or other doctoral degree	0%	4%	3%
Formal organizational role			
Frontline service	2%	3%	2%
Supervisor	3%	34%	19%
Director of service	3%	15%	9%
Quality assurance	13%	21%	17%
HR/staff development	58%	15%	35%
Other	23%	12%	17%
To whom LP/LOs report			
Director/head of service	26%	31%	27%
Senior manager	56%	54%	53%
Team of administrators	32%	5%	18%
Other	10%	15%	12%

Table 2. Link Partner/Officer activities and supports.

	Mean (SD) or %
General activities	
Hours per week dedicated to the Link Partner/Officer role	1.40 (1.20)
Research articles, chapters, and reports reviewed in the past month	5.31 (6.98)
Research articles, chapters, and reports shared with agency colleagues in the past month	4.06 (5.54)
Requests in the past month from agency peers or supervisors for assistance with evidence-informed practice	2.25 (3.43)
Engagement in evidence-informed practice activities (<i>scale</i>)	2.37 (0.70)
Interaction with PART/RiP (<i>scale</i>)	3.28 (0.85)
Specific knowledge brokering and organizational support efforts	
Promoting evidence-informed practice in the agency (<i>scale</i>)	2.67 (0.95)
Staff training around evidence-informed practice (<i>scale</i>)	2.17 (1.04)
Supporting evidence-gathering projects (<i>scale</i>)	2.60 (1.05)
Supporting evidence-informed practice conversations (<i>scale</i>)	1.80 (0.87)
Locating and sharing relevant evidence (<i>scale</i>)	2.78 (0.95)
Supports for the Link Partner/Officer role	
Frequency of communication with other Link Partners/Officers (<i>scale</i>)	1.86 (0.83)
Individual supports for the Link Partner/Officer role (<i>scale</i>)	2.96 (0.94)
Organizational supports for evidence-informed practice (<i>scale</i>)	3.20 (0.76)
Received training in preparation for the Link Partner/Officer role	23%
Sees self as a part of a community of professionals including other Link Partners/Officers	64%

Note: Full sample of LPs and LOs was used. All scales were measured via 5-point Likerts. The composition of scales is described in the [Appendix](#).

and reports, shared an average of 4.1 such research materials, and received 2.3 requests from agency colleagues for assistance with evidence-informed practice.

Using a 12-item scale of engagement in evidence-informed practice activities, respondents noted that they were engaged in evidence-informed practice efforts between “A little” and “Sometimes” at work ($M = 2.4$, $SD = 0.7$). Table 2 and Figure 1 summarize quantitative and qualitative survey responses depicting activities required in fulfilling the LP/LO role. As noted in Figure 1, the major activities related to carrying out the LP/LO role are divided between (1) *externally-focused linking activities*, connecting agency staff to IOs and other outside evidence resources and (2) *internally-focused linking activities* to promote the use of evidence in practice and embedding research into organizational practice.

Externally focused linkages

In locating and sharing evidence resources, LPs/LOs primarily sought to build the research absorptive capacity of their organizations through promoting and accessing IO research materials and resources. For example, one LO noted, “We also use RiP promotional material and have tag lines on our e-mail signature strip linking to the RiP website. We incorporate RiP learning events into our own Learning Programme e.g. if you like that, you will like this.” Further, LP/LOs also described engaging in considerable efforts to promote and coordinate staff participation in IO training and learning events (e.g., “Disseminating information from RiP, confirming training event participation, responding to questions and promoting RiP membership”). Less attention was given to specific steps for increasing access to non-IO resources for evidence-informed practice or the process of finding and evaluating relevant research. Based on a seven-item scale of engagement in locating and sharing relevant evidence throughout the agency, respondents noted that they were involved between “A little” and “Sometimes” ($M = 2.8$, $SD = 1.0$).

Internally focused promotion of evidence-informed practice

Using a six-item scale of engagement in promoting evidence-informed practice in the agency, respondents noted that they were involved between “A little” and “Sometimes” ($M = 2.7$, $SD = 1.0$). To facilitate the engagement of staff in evidence-informed practice, LP/LO described networking with agency staff to support their evidence-informed practice efforts (e.g., “maintaining personal relationships with key staff who will then continue the promotion/embedding in relation to the messages”). Many respondents noted that sharing and disseminating research resources with others in their organization was an essential aspect of their LP/LO role (e.g., “email to key people highlighting specifics to save them time”). In response to a five-item scale of efforts to promote staff training around evidence-informed practice, respondents suggested that they were similarly involved between “A little” and “Sometimes” ($M = 2.2$, $SD = 1.0$). Some participants reported conducting internal training via staff meetings, lunch hour trainings, workshops, or forums that included the distribution of IO materials and developing informal learning communities through group-based activities. However, respondents were comparatively less involved in supporting evidence-informed practice conversations (five-item scale; $M = 1.8$; $SD = 0.9$). And yet several respondents noted that they gave priority to working with individual staff via case consultation, mentoring, or coaching to support their evidence-informed practice efforts and to modeling evidence-informed practice or providing concrete examples of successful evidence-informed practice in action.

Several respondents also noted that their goal was to embed evidence into the daily work of all aspects of their organization. As one respondent suggested, “We are at the beginning stages of engaging management and staff in using the tools provided as a first step in embedding evidence-informed practice in everything we do.” For some LP/LOs, this process was described as including integrating evidence into auditing processes, individual clinical supervision practices, strategic planning for the organization, the use of specific evidence-based programs, and integrating the use of evidence in practice in staff-performance review processes. This also entailed encouraging staff to participate in research and evaluating agency services that included managing and analyzing agency data. A six-item scale determined that LPs/LOs were involved between “A little” and “Sometimes” in supporting evidence-gathering projects ($M = 2.6$, $SD = 1.05$).

- I. Externally Focused Linking Activities
 - Promoting and facilitating access to PART/RiP and external research materials for agency staff (n=206).
 - Increasing access to resources for evidence-informed practice (n=40).
 - Finding and evaluating relevant research (n=21).
 - Serving as a liaison or advocate for PART/RiP by promoting and coordinating staff participation in PART/RiP trainings and events (n=93).
 - Increasing awareness of resources for evidence-informed practice (n=36).
- II. Internally Focused Promotion of Evidence Informed Practice
 - a. Facilitating the engagement of specific staff in evidence-informed practice
 - Networking with staff to support their evidence-informed practice efforts (n=124).
 - Sharing/disseminating research resources with others in their organization (n=162).
 - Working with individual staff members through case consultation, individual support, mentoring, or coaching to support their evidence-informed practice efforts (n=90).
 - Conducting internal training via staff meetings, brown bags, workshops, or forums, often involving the distribution of PART/RiP materials (n=61).
 - Developing informal learning communities through group-based activities (n=30).
 - Promoting the use of evidence in practice by modeling evidence-informed practice or providing concrete examples of successful evidence-informed practice in action (n=54).
 - b. General efforts to embed research into organizational practice
 - Encouraging staff to participate in research and evaluation about ongoing agency services (n=52).
 - Managing and analyzing agency data (n=30).
 - Integrating evidence into auditing processes (n=11), individual clinical supervision practices (n=7), strategic planning for the organization (n=7), the use of specific evidence-based programs (n=5), and integrating the use of evidence in practice in staff performance review processes (n=2)

Figure 1. Perceptions of major responsibilities of the link partner/officer role*.

*Some of these themes were mentioned in relation to non-link partner/officer duties, as all respondents balanced their link partner/officer responsibilities with other formal duties.

Perceptions of organizational supports for the LP/LO role

As can be seen in Table 2 on the perceptions of organizational supports for the LP/LO role, LP/LOs noted they could commit only a limited amount of time to the role; and less than a quarter of respondents (23%) had received any training in preparation for the role. Many respondents reported that the time demands of their formal role limited the amount of time they could dedicate to the LP or LO role, including attendance at training and networking events for LPs and LOs. Two scales were used to determine the degree of supports available for LPs/LOs. An eight-item scale was used to determine the sufficiency of individual supports for LPs/LOs; on average, respondents neither agreed nor disagreed with statements that they had sufficient time, training, and preparation to carry out their LP/LO role ($M = 3.0$, $SD = 0.9$). Over 30 respondents explicitly stated that they did not have enough time to sufficiently fulfill the requirements of the role.

In addition, a 12-item scale was used to identify whether organizational supports (including funding, mentoring, and administrative champions) were available for LPs/LOs. On average, respondents generally did not perceive these supports to be sufficient ($M = 3.2$, $SD = 0.8$). While many participants characterized their organization as having a learning culture and promoting a positive view of EIP, several respondents noted that their organization supported evidence-informed practice “in word only.” Others noted that evidence-informed practice needed to be included in their organization’s long-term planning strategies in order to increase organizational support for the

specific LP/LO role. Some respondents felt that staff did not have enough time to access, absorb, and consider application of IO resources and that having more face-to-face time with staff would increase staff use of evidence.

Using a six-item scale to report the level of their interaction with IOs, respondents indicated that they participated in activities between “Sometimes” and “Frequently” ($M = 3.3$, $SD = 0.9$). A subset of respondents reported receiving agency-specific support and training from the IO in the form of in-person contact, telephone consultation, and/or written materials. In addition, in response to an eight-item scale designed to assess the general level of communication with other LPs/LOs, respondents noted that they communicated between “None” and “A little” with other LP/LO colleagues ($M = 1.9$, $SD = 0.8$). In open-ended questions, few respondents reported connecting with other LPs/LOs, and several made comments about feeling isolated in their role and desiring more contact and on-going support from peers. In contrast, approximately two-thirds of respondents (64%) viewed themselves as part of a community of professionals comprising other LPs/LOs.

Discussion

Building on the literature related to knowledge-sharing systems within and among HSOs, as well as the classic and contemporary studies of knowledge brokers (particularly in health care settings), this study sought to: (1) develop a demographic portrait of Canadian LPs and UK LOs, (2) identify the major activities performed by LPs/LOs in their formal organizational role, and (3) capture their perceptions of the degree of support provided by their HSOs. Our survey data suggest that LPs and LOs were seasoned professionals, with over a decade of experience in the human service sector and approximately 5 years in their current role. Most respondents supervised between 2 and 4 employees and occupied staff development, direct-service supervisory, and quality-assurance roles. The levels of LP/LO activity were modest, reflecting the small number of hours per week (1.4 on average) that they were able to dedicate to the role. The LPs'/LOs' understanding of their role as a promoter and facilitator of IO resources can be seen in the following frequently reported activities: (1) sharing and facilitating access to IO research resources; (2) facilitating the engagement of staff in evidence-informed practice through outreach, training, and consultation; and (3) using various methods to embed research into daily organizational processes. In general, respondents reported moderate levels of support for their efforts within their own HSOs and from the external IO.

These findings need to be understood in relationship to a number of limitations associated with the study methodology. First, due to the manner in which they were invited to participate, a definitive response rate for LOs in the United Kingdom could not be determined. Second, because the survey was sent only to LOs and LPs for whom the IOs had accurate email addresses, the study may have undercounted the number of potential respondents. Third, due to the nature of the survey questions, less active LPs and LOs may have felt uncomfortable answering questions concerning their LP/LO activities, thus potentially biasing responses to these questions. Fourth, a similar possibility may have existed due to social desirability bias, as respondents may have overestimated the significance of their efforts in carrying out the role. Fifth, while each of the multi-item scales developed in the current study had strong internal consistency, it is possible that measurement error was incorporated into each scale through the omission of other indicators of the underlying construct being measured.

Despite these limitations, the study findings provide insight into (1) the nature of the individuals engaged in the LP/LO role; (2) the active dimensions of the LP/LO role; and (3) the degree of organizational supports available to LPs/LOs. With respect to the first topic, LPs/LOs varied somewhat in their level of education and prior human service experience, their formal role in the organization (which ranged from administrative assistants to executive-level personnel), and their pathway into the specific role (i.e., whether they were assigned to the position or volunteered for it). Despite these differences, the main findings point to the population of LOs/LPs as comprising experienced professionals in positions of middle or senior management with some authority within

their HSOs. This is consistent with classic and recent findings that, in organizations with complex task environments, effective boundary-spanning-knowledge brokers hold some degree of formal authority, are well respected by peers for their technical skills and experience, and are more likely to have advanced education or training (Tushman, 1977; Bornbaum et al., 2015).

These descriptive findings help situate the LP/LO role (and those embodying it) within HSOs. From a theoretical perspective, a central premise in classic organizational-behavior literature is that organizational status denotes role importance—that is, the level of authority of individuals attached to a formal role can serve as a marker of its importance to the organization and can also be used to draw inferences concerning the value of the underlying organizational functions for which the role was developed (Katz & Kahn, 1978). In the current study, practitioners in important organizational roles (e.g., program supervisor, staff-development specialist, quality-assurance analyst) were often carrying out the LP/LO role. Despite their years of experience in the human service sector and their HSOs, most LOs/LPs were not in senior executive-level positions. These results suggest that LOs/LPs were chosen by their organizations (more than half of the respondents reported being assigned to the role) because of the specific position they held in the organization (e.g., moderate levels of formal authority with possibly a high degree of informal credibility and influence with peers). Such a choice might indicate a strategic understanding held by senior management of the qualities that would enhance the link role; alternatively, the selection of individual LOs/LPs may reflect informal advice provided by IOs in helping new member organizations identify promising candidates for the role.

With respect to the active dimensions of the LP/LO role, the findings suggest a distinction between internal activities to promote evidence-informed practice within HSOs and external activities designed to connect HSOs and their staff members with the research resources of the IO. We considered our findings using the classic question of time versus task (Katz & Kahn, 1978); namely, given the limited amount of time devoted to the LP/LO role, which tasks should be prioritized or de-emphasized and with what implications for the development of the role? The average ratings on all scales pertaining to various dimensions of internally focused engagement in the LP/LO role ranged from “A little” to “Sometimes.” We interpret these findings as reflecting the modest priority given to the internal tasks associated with the LP/LO role. Since the standard deviations on these scales averaged around one point, the magnitude of difference in the intensity noted by LPs/LOs across the major internal task domains was small. And externally, respondents noted that the frequency of the interaction with their IO was between “Sometimes” and “Frequently,” suggesting that greater attention was given to external rather than internal activities associated with the role.

A similar portrait of LP/LO role and tasks can be derived from the qualitative data in which the most-frequently-cited activities were externally focused. LPs/LOs sought to promote and facilitate access to materials and learning events provided by the IO and clearly identified themselves as liaisons between it and their HSO. Internally, respondents viewed their role, to a lesser degree, to include the following components: sharing/disseminating research resources; promoting attention to evidence-informed practice across the organization; and supporting individual staff members engaged in evidence-informed practice through case consultation, individual support, mentoring, or coaching. It is clear in the findings that the research resources and training programs being supplied by the IOs were the primary resources LPs/LOs shared in order to promote and embed evidence-informed practice.

These results suggest that the activities of LPs/LOs reflect a substantial dependence upon the research resources and learning events provided by the IO, which is consistent with how the role is conceptualized by the IOs. It is also consistent with most LOs’ and LPs’ understanding of their role as the primary brokers of the relationship between their HSO and the IOs. The stronger emphasis on externally focused activities may be a reflection of the way in which LPs and LOs managed their time-versus-task dilemma; that is, given the limited time LOs and LPs were able to dedicate to the role, these individuals may have focused first on discrete, routine activities that reflected their primary duties—that of linking staff to external resources.

The time-versus-task dilemma was apparent in the central finding that LPs/LOs perceived that they did not have enough organizational support to fully inhabit their role. When asked about their preferences for carrying out the role, LPs/LOs called for more-concrete resources to support their role, especially time and training. Only 23% of respondents reported being trained for the role. Many reported that their non-LP/LO duties prevented them from carrying out their internal LP/LO responsibilities or developing stronger connections with the IO or with other LPs/LOs by participating in quarterly or annual training and networking events. Given the limited amount of time dedicated to the position, these findings may suggest that the LO/LP role was viewed within the HSOs included in this study as important but not critical. However, this possibility is balanced by the fact that the respondents did perceive moderate formal and informal support from senior management regarding the importance of implementing evidence-informed practice and for carrying out the LP/LO role. This paradox may reflect the significant cutbacks many participating organizations were experiencing at the time of the study.

Implications for practice

Taken together, these findings suggest a number of implications for developing and sustaining the LP/LO role within HSOs.

- (1) *Role clarity related to LP/LO tasks and responsibilities as well as the process of linking the HSO to the IO are essential.* These findings highlight the importance of connecting leaders from the IO with those of HSOs to engage in ongoing dialogue to clarify expectations in the form of job descriptions and specifying the time and resources needed to support the linking role. This dialogue could lead to decisions that help to alleviate the role strain experienced by LPs and LOs as they seek to fulfill their commitments to both the member HSO and to the IO. In addition, formal job descriptions for the LO or LP role can help HSOs identify potential LPs and LOs whose current duties can be modified to accommodate the linking role. Finally, it is important for IOs to recognize and collaboratively address the inherent tension that exists for service-delivery organizations between allocating resources to support evidence-informed practice and those resources needed to support the service mission of the agency.
- (2) *Sufficient resources need to be identified to support the role both within the HSO and from the IO in relationship to the necessary time, training, and mentoring for effective role performance.* HSOs also need to provide LPs and LOs access to formal channels of organizational communication to effectively disseminate evidence and other informational resources. HSO leaders can further support boundary spanning by enhancing the overall culture of the organization related to promoting evidence-informed practice. This type of leadership is needed to avoid isolating the LPs/LOs with the sole responsibility of serving as the primary conduit for research resources within the organization without sufficient organizational supports. As reported by some LPs and LOs, one strategy is to develop a team approach to implementing evidence-informed practice where LPs/LOs partner with other senior administrative staff and junior staff from different service units to become the organization's champions of evidence-informed practice and part of a "knowledge mobilization team" (Dill & Shera, 2015, p. 330). Such models also illustrate greater investment of organizational resources in EIP, signaling to staff that senior leadership is committed to engaging in evidence-informed practice.
- (3) *Attention needs to be given to the extent to which the LP/LO role complements the other professional roles and duties of the employee (e.g., program manager, staff-development specialist, quality-assurance analyst).* For example, LP/LOs holding staff-development roles appear to be more likely to invest in coordinating external training events and creating and executing relevant internal training events related to EIP. Similarly, LP/LOs working in quality assurance may focus more on engaging staff in internal evaluation and assessment of

programs in order to increase staff commitment to evidence-informed practice. The biggest challenge may be faced by those serving as program managers overseeing service delivery where EIP competes with the demands of daily practice.

- (4) *More attention could be paid to the selection of LPs/LOs by identifying candidates who have (a) sufficient informal influence among their peers, (b) sufficient technical capabilities relevant to evidence-informed practice, and (c) sufficient investment in assuming the knowledge-broker role.* Such candidates need to be provided with access to formal channels of dissemination within the organization along with the formal authority often associated with middle- or senior-management positions. In essence, the effectiveness of the LP/LO role relies upon the capacities of agency leaders to convey a clear understanding of the linking role, the allocation of supports for effective boundary spanning, and the identification of staff members with the professional capacities to balance the multiple roles held by LPs/LOs. Ultimately, the success of those assuming the linking role is dependent upon the selection of individuals with the necessary professional and technical attributes to (a) model evidence-informed practice, (b) access training and research resources, (c) coach colleagues on engaging in evidence-informed practice, and (d) develop support structures to sustain it.

Implications for research

Since this study is one of the first to capture the LP/LO role within HSOs, additional research is needed to address the following questions: (1) What individual and environmental factors contribute to the level of activity and role engagement of LPs/LOs? (2) What are the major individual, organizational, and inter-organizational factors that inform LP/LO effectiveness? (3) How do more engaged LPs/LOs differ from those who are less engaged in their specific duties? (4) How do LP/LO perceptions of organizational and peer supports (their individual characteristics and reported levels of activity) relate to the way they enter into the LP/LO role (i.e., volunteered or assigned), and how is this related to their level of engagement? (5) How are evidence-informed practices related to the technical skill, interest, and experience of the activities undertaken by LPs/LOs? and (6) How do internal organizational supports, peer support, personal and role characteristics, and EIP-related attitudes and efforts affect the strategies used by IO (e.g., new staff-training modules, new methods of research synthesis, web-based innovations to promote research sharing more easily) to influence the activity levels of LPs/LOs? These questions can be addressed through case studies and/or panel surveys to shed light on the degree to which the major activities of LPs/LOs vary in relation to changes in the professional and organizational settings in which LPs/LOs are embedded.

In addition to research seeking to identify the personal and organizational characteristics associated with different levels of LP/LO activity, future studies need to focus on the question of effectiveness. For example, to what degree are LPs/LOs able to meet the needs of individuals around evidence-informed practice through resource dissemination, individual and group training, and other methods? Similarly, how do the efforts of LPs/LOs contribute to an organization-wide shared understanding of evidence-informed practice and the creation of a learning culture? Finally, intervention research studies could focus on evaluating the impact of LPs/LOs on improving service effectiveness and outcomes.

Conclusion

The development of the link officer role is an organizational strategy for HSOs seeking to integrate research and other forms of evidence into their daily operations. This exploratory study of Canadian LPs and UK LOs sought to understand their characteristics, activities, and sense of support from within their HSOs and from their IO. These findings document the boundary-spanning nature of the role in relation to its organizational and interorganizational context and highlight the importance of developing supportive infrastructures within HSOs and between HSOs and IOs in order to help LPs/LOs engage in the process of embedding evidence-informed practice into the learning culture of their HSO.

References

- Anthony, E. K., & Austin, M. J. (2008). The role of an intermediary organization in promoting research in schools of social work: The case of the bay area social services consortium. *Social Work Research*, 32(4), 287–293. doi:[10.1093/swr/32.4.287](https://doi.org/10.1093/swr/32.4.287)
- Austin, M. J., Dal Santo, T. S., & Lee, C. (2012). Building organizational supports for research-minded practitioners. *Journal of Evidence-Based Social Work*, 9(1–2), 174–211. doi:[10.1080/15433714.2012.636327](https://doi.org/10.1080/15433714.2012.636327)
- Austin, M. J., Martin, M., Carnochan, S., Duerr Berrick, J., Goldberg, S., Kelley, J., & Weiss, B. (1999). Building a comprehensive agency-university partnership: The Bay Area Social Services Consortium. *Journal of Community Practice*, 6(3), 89–106. doi:[10.1300/J125v06n03_05](https://doi.org/10.1300/J125v06n03_05)
- Bornbaum, C. C., Kornas, K., Peirson, L., & Rosella, L. C. (2015). Exploring the function and effectiveness of knowledge brokers as facilitators of knowledge translation in health-related settings: A systematic review and thematic analysis. *Implementation Science*, 10, 162. <http://doi.org/10.1186/s13012-015-0351-9>
- Chew, S., Armstrong, N., & Martin, G. (2013). Institutionalising knowledge brokering as a sustainable knowledge translation solution in healthcare: How can it work in practice? *Evidence and Policy: A Journal of Research, Debate and Practice*, 9(3), 335–351. doi:[10.1332/174426413X662734](https://doi.org/10.1332/174426413X662734)
- Conklin, J., Lusk, E., Harris, M., & Stolee, P. (2013). Knowledge brokers in a knowledge network: The case of seniors health research transfer network knowledge brokers. *Implementation Science*, 8(1), 1–10. doi:[10.1186/1748-5908-8-7](https://doi.org/10.1186/1748-5908-8-7)
- Connor, J. A., Kadel-Taras, S., & Vinokur-Kaplan, D. (1999). The role of nonprofit management support organizations in sustaining community collaborations. *Nonprofit Management and Leadership*, 10(2), 127–136. doi:[10.1002/nml.10202](https://doi.org/10.1002/nml.10202)
- Cooper, A. (2014). Knowledge mobilisation in education across Canada: A cross-case analysis of 44 research brokering organisations. *Evidence and Policy: A Journal of Research, Debate and Practice*, 10(1), 29–59. doi:[10.1332/174426413X662806](https://doi.org/10.1332/174426413X662806)
- Currie, G., & White, L. (2013). Inter-professional barriers and knowledge brokering in an organizational context: The case of healthcare. *Organization Studies*, 33(10), 1333–1361. doi:[10.1177/0170840612457617](https://doi.org/10.1177/0170840612457617)
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50. doi:[10.1186/1748-5908-4-50](https://doi.org/10.1186/1748-5908-4-50)
- Dill, K. A., & Shera, W. (2015). Empowering human services organizations to embrace evidence-informed practice: International best practices. *Human Service Organizations: Management, Leadership and Governance*, 39(4), 323–338. doi:[10.1080/23303131.2015.1050141](https://doi.org/10.1080/23303131.2015.1050141)
- Farris, G. (1972). The effects of individual roles on performance in innovative groups. *R&D Management*, 3, 23–28. doi:[10.1111/j.1467-9310.1972.tb00992.x](https://doi.org/10.1111/j.1467-9310.1972.tb00992.x)
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature* (FMHI Publication #231). Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network.
- Frost, P., & Whitley, R. (1971). Communication patterns in a research lab. *R&D Management*, 1, 71–79.
- Gray, J. A. M. (2009). *Evidence-based healthcare and public health: How to make decisions about health services and public health*. Edinburgh, NY: Churchill Livingstone/Elsevier.
- Havelock, R. G. (1967). *Dissemination and translation roles in education and other fields: A comparative analysis*. Center for Research on Utilization of Scientific Knowledge Institute for Social Research, University of Michigan, Ann Arbor, MI.
- Jackson-Bowers, E., Kalucy, L., & McIntyre, E. (2006). *Knowledge brokering. Focus on. . . Issue No. 4. Primary health care research and information service*. Adelaide, Australia: Flinders Press.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York: Wiley.
- Kramer, D. M., Cole, D. C., & Leithwood, K. (2004). Doing knowledge transfer: Engaging management and labor with research on employee health and safety. *Bulletin of Science, Technology and Society*, 24(4), 316–330. doi:[10.1177/0270467604267003](https://doi.org/10.1177/0270467604267003)
- Lomas, J. (2007). The in-between world of knowledge brokering. *British Medical Journal*, 334(7585), 129–132. doi:[10.1136/bmj.39038.593380.AE](https://doi.org/10.1136/bmj.39038.593380.AE)
- Long, J. C., Cunningham, F. C., & Braithwaite, J. (2013). Bridges, brokers and boundary spanners in collaborative networks: A systematic review. *BioMedCentral Health Services Research*, 13(1), 158. doi:[10.1186/1472-6963-13-158](https://doi.org/10.1186/1472-6963-13-158)
- March, J. G., & Simon, H. A. (1993). *Organizations* (2nd ed.). Cambridge, MA: Wiley-Blackwell.
- McBeath, B., & Austin, M. J. (2015). The organizational context of research-minded practitioners: Challenges and opportunities. *Research on Social Work Practice*, 25(4), 446–459. doi:[10.1177/1049731514536233](https://doi.org/10.1177/1049731514536233)
- McBeath, B., Jolles, M. P., Carnochan, S., & Austin, M. J. (2015). Organizational and individual determinants of evidence use by managers in public human service organizations. *Human Service Organizations: Management, Leadership and Governance*, 39(4), 267–289. doi:[10.1080/23303131.2015.1044588](https://doi.org/10.1080/23303131.2015.1044588)

- Meyer, M. (2010). The rise of the knowledge broker. *Science Communication*, 32(1), 118–127. doi:[10.1177/1075547009359797](https://doi.org/10.1177/1075547009359797)
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2013). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage.
- Pettigrew, A. (1972). Information control as a power resource. *Sociology*, 6, 187–204. doi:[10.1177/003803857200600202](https://doi.org/10.1177/003803857200600202)
- Plath, D. (2014). Implementing evidence-based practice: An organisational perspective. *British Journal of Social Work*, 44(4), 905–923. doi:[10.1093/bjsw/bcs169](https://doi.org/10.1093/bjsw/bcs169)
- Raffel, K. K., Lee, M. Y., Dougherty, C. V., & Greene, G. J. (2013). Making it work: Administrator views on sustaining evidence-based mental health interventions. *Administration in Social Work*, 37(5), 494–510. doi:[10.1080/03643107.2013.828003](https://doi.org/10.1080/03643107.2013.828003)
- Rivard, L. M., Russell, D. J., Roxborough, L., Ketelaar, M., Bartlett, D. J., & Rosenbaum, P. (2010). Promoting the use of measurement tools in practice: A mixed-methods study of the activities and experiences of physical therapist knowledge brokers. *Physical Therapy*, 90(11), 1580–1590. doi:[10.2522/ptj.20090408](https://doi.org/10.2522/ptj.20090408)
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Los Angeles: Sage.
- Shera, W., & Dill, K. (2012). Promoting evidence-informed practice in child welfare in Ontario: Progress, challenges and future directions. *Research on Social Work Practice*, 22(2), 204–213. doi:[10.1177/1049731511406552](https://doi.org/10.1177/1049731511406552)
- Traynor, R., DeCorby, K., & Dobbins, M. (2014). Knowledge brokering in public health: A tale of two studies. *Public Health*, 128(6), 533–544. doi:[10.1016/j.puhe.2014.01.015](https://doi.org/10.1016/j.puhe.2014.01.015)
- Tushman, M. L. (1977). Special boundary roles in the innovation process. *Administrative Science Quarterly*, 22(4), 587–605. doi:[10.2307/2392402](https://doi.org/10.2307/2392402)
- Tushman, M. L., & Scanlan, T. J. (1981a). Boundary spanning individuals: Their role in information transfer and their antecedents. *Academy of Management Journal*, 24(2), 289–305. doi:[10.2307/255842](https://doi.org/10.2307/255842)
- Tushman, M. L., & Scanlan, T. J. (1981b). Characteristics and external orientations of boundary spanning individuals. *Academy of Management Journal*, 24(1), 83–98. doi:[10.2307/255825](https://doi.org/10.2307/255825)
- Vinokur-Kaplan, D., & McBeath, B. (2014). Co-located nonprofit centers. *Nonprofit Management and Leadership*, 25(1), 77–91. doi:[10.1002/nml.21110](https://doi.org/10.1002/nml.21110)
- Waring, J., Currie, G., Crompton, A., & Bishop, S. (2013). An exploratory study of knowledge brokering in hospital settings: Facilitating knowledge sharing and learning for patient safety? *Social Science and Medicine*, 98, 79–86. doi:[10.1016/j.socscimed.2013.08.037](https://doi.org/10.1016/j.socscimed.2013.08.037)
- Whitley, R., & Frost, P. (1973). Task type and information transfer in a government research laboratory. *Human Relations*, 26(4), 537–550. doi:[10.1177/001872677302600409](https://doi.org/10.1177/001872677302600409)
- Williams, P. (2002). The competent boundary spanner. *Public Administration*, 80(1), 103–124. doi:[10.1111/padm.2002.80.issue-1](https://doi.org/10.1111/padm.2002.80.issue-1)

Appendix

Scale = Engagement in evidence-informed practice activities (average of 12 items, alpha = 0.85) (drawn from *The Measure of Evidence-Informed Practice in the Human Services* (McBeath, Jolles, Carnochan, & Austin, 2015)).

Question wording: “On average, how often do you do this at work?” (1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Continuously).

Item	Mean	Standard deviation
Using and searching online databases to identify promising practices	2.82	1.01
Conducting quick literature reviews (to gather the best available evidence) to look for answers to my questions	2.70	0.98
Surveying clients to assess their needs	2.17	1.16
Conducting program-improvement studies to see if the agency is delivering services the best way possible	2.13	1.23
Conducting outcome studies to see whether agency services and programs are affecting clients as intended	2.13	1.25
Reviewing case records from past and/or current clients to see how we are serving them	2.27	1.23
Reviewing agency reports containing information such as quarterly statistics to see how the agency is doing in key areas	3.15	1.26
Involving outside researchers to help improve agency practices and impacts	2.26	0.99
Involving clients in evaluating programs and services	2.16	1.15
Involving clients in planning and improving programs	2.01	1.06
Developing researchable questions in response to current agency needs	2.06	1.05
Reviewing literature to inform strategic planning or potential interventions	2.63	1.19
Average	2.37	0.70

Scale = Interaction with PART/RiP (average of 6 items, alpha = 0.85).

Question wording: “In general, how often do you participate in the following activities?” (1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Continuously).

Item	Mean	Standard deviation
Distributing PART/RiP materials in the agency	3.88	0.98
Encouraging your agency colleagues to use the PART/RiP website	4.03	0.90
Keeping PART/RiP informed of major changes occurring to your agency	2.49	1.19
Attending link partner/officer-specific meetings	2.93	1.20
Participating in PART/RiP change initiatives	2.96	1.23
Coordinating agency participation in PART/RiP-related meetings and events	3.39	1.16
Average	3.28	0.85

Scale = Promoting evidence-informed practice in the agency (average of 6 items, alpha = 0.87).

Question wording: “In general, how often do you engage in the following evidence-informed practice activities?” (0 = I am not required to support this activity, 1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Continuously).

Item	Mean	Standard deviation
Promote agency-wide use of evidence to support improving services and outcomes	3.35	1.17
Strategize and plan for evidence-informed practice implementation	2.58	1.26
Coordinate the integration of evidence-informed practice in agency departments/units	2.24	1.21
Cultivate staff interest in involving service users in evidence-gathering projects	2.56	1.37
Engage in administrative tasks related to evidence-informed practice correspondence and project management	2.59	1.37
Present information about evidence-informed practice (e.g., staff meetings, conferences, etc.)	2.70	1.21
Average	2.67	0.95

Scale = Staff training around evidence-informed practice (average of 5 items, $\alpha = 0.84$).

Question wording: "In general, how often do you engage in the following evidence-informed practice activities?" (0 = I am not required to support this activity, 1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Continuously).

Item	Mean	Standard deviation
Train individual staff around evidence-informed practice	2.21	1.53
Lead workshops for groups of staff in evidence-informed practice	1.84	1.25
Lead agency-wide, evidence-informed practice training and learning events	1.89	1.27
Gather feedback from evidence-informed practice training and learning events	2.53	1.32
Periodic sessions to introduce new staff to evidence-informed practice	2.32	1.47
Average	2.17	1.04

Scale = Supporting evidence-gathering projects (average of 6 items, $\alpha = 0.90$).

Question wording: "In general, how often do you engage in the following evidence-informed practice activities?" (0 = I am not required to support this activity, 1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Continuously).

Item	Mean	Standard deviation
Identify agency needs related to evidence-gathering projects and Partnerships	2.64	1.33
Develop evidence gathering projects in collaboration with staff	2.63	1.38
Lead special evidence-gathering projects and partnerships	2.40	1.26
Assist students with their evidence-gathering projects	2.56	1.35
Assist staff with their evidence-gathering projects	2.89	1.29
Assist external researchers (e.g., from local universities) with their evidence-gathering projects	2.57	1.27
Average	2.60	1.05

Scale = Supporting evidence-informed practice conversations (average of 5 items, $\alpha = 0.81$).

Question wording: "In general, how often do you engage in the following evidence-informed practice activities?" (0 = I am not required to support this activity, 1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Continuously).

Item	Mean	Standard deviation
Present evidence at staff meetings	2.24	1.22
Facilitate dialogue about evidence-informed practice at staff meetings	2.26	1.25
Hold regularly scheduled meetings with groups of staff to talk about evidence-informed practice	1.87	1.31
Facilitate "journal clubs" with groups of staff to review current literature	1.14	0.96
Facilitate discussions about current literature with different agency programs/units	1.30	1.08
Average	1.80	0.87

Scale = Locating and sharing relevant evidence (average of 7 items, $\alpha = 0.86$).

Question wording: "In general, how often do you engage in the following evidence-informed practice activities?" (0 = I am not required to support this activity, 1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Continuously).

Item	Mean	Standard deviation
Search for evidence that would be helpful for staff to improve services and outcomes	2.99	1.12
Search for evidence related to service user perspectives	2.62	1.32
Maintain an online library of relevant evidence (e.g., webinars, reports)	2.38	1.52
Share relevant external evidence (e.g., reports, articles) with specific staff	3.11	1.15
Share relevant internal evidence (e.g., reports, program data) with specific staff	3.07	1.28
Share evidence on service-user perspectives with specific staff	2.55	1.47
Make external and internal evidence available on agency intranet site	2.63	1.38
Average	2.78	0.95

Scale = Frequency of communication with other link partners/officers (average of 8 items, $\alpha = 0.96$).

Question wording: "In general, how often do you communicate (in person, by phone, or via email) with other link partners about the following topics?" (1 = None, 2 = A little, 3 = Sometimes, 4 = Frequently, 5 = Constantly).

Scale = Individual supports for the link partner/officer role (average of 8 items, $\alpha = 0.87$).

Item	Mean	Standard deviation
Evidence from outside your agency	1.73	0.89
Evidence from inside your agency	1.83	0.94
Strategies for locating relevant external evidence for your agency	1.82	0.89
Strategies to share external and internal evidence effectively with agency staff	1.90	0.93
Strategies for training staff about evidence-informed practice	1.91	1.05
Strategies for cultivating staff interest in evidence-informed practice	1.96	1.02
Strategies to support evidence-gathering projects in your agency	1.71	0.92
Strategies for carrying out your link partner/officer role more effectively	2.00	0.96
Average	1.86	0.83

Question wording: "In order to identify potential challenges facing link partners/officers, please note your responses to the following statements." (1 = Strongly disagree, 2 = Slightly disagree, 3 = Neither disagree nor agree, 4 = Slightly agree, 5 = Strongly agree).

Item	Mean	Standard deviation
I have enough time to carry out my link partner/officer responsibilities.	2.28	1.20
Protected time is available for me to attend external evidence-informed practice training workshops.	2.84	1.46
I have enough resources to carry out my link partner/officer responsibilities.	2.86	1.33
I have enough training in evidence-informed practice to carry out my link partner/officer responsibilities.	2.99	1.34
I have enough experience with implementing evidence-informed practice in agencies to carry out my link partner/officer responsibilities.	3.04	1.27
I have enough experience finding evidence-informed practice resources to carry out my link partner/officer responsibilities.	3.41	1.16
I have enough experience training others in evidence-informed practice to carry out my link partner/officer responsibilities.	3.02	1.30
I have enough support from key senior managers to carry out my link partner/officer responsibilities.	3.22	1.33
Average	2.96	0.94

Scale = Organizational supports for evidence-informed practice (average of 12 items, $\alpha = 0.88$).

Question wording: "In order to identify potential challenges facing link partners/officers, please note your responses to the following statements." (1 = Strongly disagree, 2 = Slightly disagree, 3 = Neither disagree nor agree, 4 = Slightly agree, 5 = Strongly agree).

Item	Mean	Standard deviation
Evidence-informed practice is supported throughout the organization.	3.88	1.13
Agency staff have enough time to help me carry out my link partner/officer responsibilities.	2.37	1.08
The agency is required to engage in evidence-informed practice.	3.66	1.21
Funding is available to support evidence-informed practice implementation across the agency.	3.01	1.20
The agency has the resources needed for me to carry out my link partner/officer responsibilities.	3.15	1.13
The major changes experienced by my organization provide opportunities for me to carry out link partner/officer responsibilities.	3.15	1.17
Senior managers act as champions of the link partner/officer role throughout the agency.	2.97	1.32
Senior managers provide mentorship to me as a link partner/officer.	2.46	1.31
Past link partners/officers provide mentorship to me as a link partner/officer.	2.23	1.29
Senior managers possess an understanding of the importance of evidence-informed practice.	4.00	0.94
Senior managers understand how to implement evidence-informed practice.	3.54	1.14
Senior managers support evidence-informed practice implementation.	3.89	1.02
Average	3.20	0.76