

Managerial and Frontline Perspectives on the Process of Evidence-Informed Practice Within Human Service Organizations

Sarah Carnochan, Bowen McBeath & Michael J. Austin

To cite this article: Sarah Carnochan, Bowen McBeath & Michael J. Austin (2017): Managerial and Frontline Perspectives on the Process of Evidence-Informed Practice Within Human Service Organizations, Human Service Organizations: Management, Leadership & Governance, DOI: [10.1080/23303131.2017.1279095](https://doi.org/10.1080/23303131.2017.1279095)

To link to this article: <http://dx.doi.org/10.1080/23303131.2017.1279095>



Accepted author version posted online: 10 Jan 2017.
Published online: 10 Jan 2017.



Submit your article to this journal [↗](#)



Article views: 30



View related articles [↗](#)



View Crossmark data [↗](#)

Managerial and Frontline Perspectives on the Process of Evidence-Informed Practice Within Human Service Organizations

Sarah Carnochan^a, Bowen McBeath^b, and Michael J. Austin^a

^aMack Center on Nonprofit & Public Sector Management in the Human Services, School of Social Welfare, University of California Berkeley, Berkeley, California, USA; ^bSchool of Social Work, Portland State University, Portland, Oregon, USA

ABSTRACT

Emphasis on evidence-informed practice (EIP) in human service organizations aimed at improving service quality and client outcomes has increased in recent decades. Research has suggested that the organizational context shapes EIP, yet few studies have explored the agency-based activities that constitute this form of practice. This survey of 473 managers and frontline practitioners in 11 county human service organizations examines EIP activities in agency settings. Analysis of responses to open-ended questions identifies the specific cognitive, interactive, action, and compliance dimensions of EIP, including challenges. EIP emerges as complex and nonlinear, shaped by organizational environment, practitioner perspectives, and client needs.

KEYWORDS

Critical thinking;
evidence-informed practice;
human services;
organizational learning;
organizational structure

In recent decades, the social work profession has experienced growing attention to the use of evidence to improve service quality and client outcomes. The task-centered practice, empirical clinical practice, and single-system design models of frontline practice represent efforts to link empiricism to social work practice (Marsh & Fisher, 2008; Okpych & Yu, 2014; Reid, 2002; Thyer & Myers, 2011). Since the 1990s, two related but distinct approaches to incorporating evidence into human service delivery have emerged: the empirically supported interventions (ESI) approach and the evidence-informed practice (EIP) or, alternatively, evidence-based practice (EBP) framework (Fisher, 2014; McBeath, Briggs & Aisenberg, 2010). These frameworks are increasingly dominant in social work policy and practice and occupy an important position in the social work literature (Hodge, Lacasse, & Benson, 2012).

The ESI approach seeks to improve service effectiveness by implementing rigorously evaluated interventions with fidelity to specific practice protocols (Barth et al., 2012; Thyer & Myers, 2011). In the United States, federal, state, and local government entities have engaged in an array of strategies to promote ESIs (Bellamy, Bledsoe, & Traube, 2006). For example, the Substance Abuse and Mental Health Services Administration offers a website listing evidence-based mental health interventions, while the California Evidence-Based Clearinghouse for Child Welfare website provides similar information for child welfare services (California Evidence-Based Clearinghouse for Child Welfare [CEBC], 2015; Thyer & Myers, 2011). These federal- and state-level efforts to promote the diffusion of ESIs have influenced parallel efforts by local governments and community-based agencies. In Sonoma County, located in Northern California, the Upstream Investments Initiative provides information on a comprehensive set of empirically supported interventions and prioritizes these interventions in decisions to fund community-based service providers (Sonoma County, 2011). In other states, including Oregon, public agencies (and private agencies providing contracted services) are required to dedicate substantial proportions of their service expenditures to providing ESIs (McBeath, Briggs & Aisenberg, 2010).

CONTACT Sarah Carnochan ✉ scarnochan@berkeley.edu 📠 Research Director, Mack Center on Nonprofit & Public Sector Management in the Human Services, School of Social Welfare, UC Berkeley, 16 Haviland Hall MC 7400, Berkeley, CA 94720-7400, USA.

Despite these efforts, the implementation of ESIs is still limited in human service settings, attributable to cost, challenges involved in ensuring treatment fidelity, and the complexity of adapting individual ESIs to suit specific agency and client demands (Barth, 2008; Barth et al., 2012; Horwitz et al., 2014). Scholarly critique of the ESI framework has highlighted three additional issues: (1) the mechanistic nature of “manualized” interventions that may undermine the exercise of professional judgment; (2) the top-down nature of performance measures and service models prescribed by policy makers and external researchers; and (3) the emphasis on compliance-oriented practice based on past evidence rather than innovative practice responsive to current evidence (for summaries of this literature see McBeath, Briggs & Aisenberg, 2010; Nevo & Slonim-Nevo, 2011; Webb, 2001).

In contrast to the ESI approach to strengthening frontline practice, evidence-informed practice (EIP) proposes a process framework in which practitioners integrate “individual practice expertise with the best available external evidence from systematic research as well as considering the values and expectations of clients” in order to inform practice decisions (Gambrill, 1999, p. 346). (We use the term evidence-informed practice (EIP) in our discussion of the literature for the sake of consistency.) While ESI strategies are comparable to managerial performance measurement approaches, with a strong emphasis on administrative accountability and control of frontline practitioners, EIP as framed by Gambrill (1999) and others is consistent with a street-level perspective in which evidence-informed decision-making by frontline practitioners is viewed as essential (Brodtkin, 2008; Ganju, 2006).

Over the past decade, studies conducted in the United States and internationally have found generally positive attitudes toward EIP among human service managers and frontline or direct service practitioners working in public and private sector settings (Beddoe, 2011; Booth, Booth, & Falzon, 2003; Collins-Camargo, Sullivan, & Murphy, 2011; Gray, Joy, Plath, & Webb, 2014; Knight, 2013; Savaya, Altschuler & Melamed, 2013). EIP process guidelines have focused on the activities of the individual frontline practitioner, outlining a process of critical reflection that involves framing researchable questions; identifying and evaluating relevant research; integrating research findings, practitioner expertise, and client values; and assessing outcomes (Gambrill, 1999; McCracken & Marsh, 2008). This multistep process has generally been understood as sequential, although little research has evaluated the extent to which practitioners view it as such. Despite the growing emphasis on using research to inform practice decisions, challenges related to research availability and utilization persist (Marsh & Fisher, 2008).

More recently, research focus on the role of practitioners and managers has expanded to consider the effects of organizational context on individuals engaged in EIP (Austin, Dal Santo & Lee, 2012; Lee, Bright, & Berlin, 2013; McBeath et al., 2015; Yousefi-Nooraie, Dobbins, & Marin, 2014). Research situating the individual evidence-informed practitioner within the organization focuses attention on practitioner discretion in carrying out formal roles within the immediate task and technical environment. Studies have identified concerns related to the effects of monitoring and the diminished professional responsibility of frontline practitioners due to managerialism and funder-driven expectations of effectiveness and efficiency (Gray, Joy, Plath, & Webb, 2012; Mullen, Bledsoe, & Bellamy, 2008; Savaya & Altschuler, 2013). Organizational factors reported in the research relate to implementation barriers and facilitating factors including leadership, organizational culture, supervision, staff training, agency resources, and access to evidence (Barratt, 2003; Booth et al., 2003; Collins-Camargo et al., 2011; Gray et al., 2012; Mullen et al., 2008; Savaya & Altschuler, 2013).

These studies highlight the practical and ethical complications of engaging in EIP within a changing political economy of human service provision emphasizing efficiency, effectiveness, and outcome attainment. This research also suggests that the role of individual evidence-informed practitioners and managers is influenced by organizational context, such that engagement with various forms of evidence may reflect (a) the availability of different types of data; (b) the priorities of administrators; (c) the overall culture of the agency in relation to the use of evidence; and (d) the degree to which individual practitioners and managers are supported to engage in evidence-informed practice.

Research situating EIP in an organizational context increasingly reflects a “methodological pluralism” with respect to the definition of evidence. This perspective acknowledges the presence and potential value of multiple types of evidence, including qualitative, quantitative, and practice-based research and agency-generated administrative and performance data, needs assessments, and client surveys (Epstein, 2011; Gould, 2006; Qureshi, 2004; Shlonsky & Mildon, 2014). Practitioners and managers in human service organizations may have limited access to external scientific research due to publisher licensing restrictions or limited time to search for, evaluate, and apply the best available scientific research (Barratt, 2003; Buckley, Tonmyr, Lewig, & Jack, 2014). In contrast, they may have access to substantial internal organizational data and reporting; however, only some of these may be relevant for addressing practice-based questions (McBeath et al., 2015).

Absent from the literature on EIP are direct explorations of the daily and organizationally situated practices involved in EIP—namely, the ways in which managers and practitioners use diverse types of evidence to inform their decision making in specific organizational settings. With respect to organizational context, the literature on knowledge management, organizational learning, and virtual communities of practice in human service organizations identifies the important role that social and relational processes play in knowledge diffusion among managers and practitioners (Cook-Craig & Sabah, 2009; Gould, 2000; Herie & Martin, 2002). This work highlights limitations inherent in the EIP process model that focuses on individual frontline practitioners without also attending to the manner in which practitioner processes may be embedded within formal organizational goals and structures and within informal organizational norms and processes. For example, Nutley, Walter, and Davies (2009) note that interactive approaches and social influence appear to be most effective in improving research use among social work practitioners, and a Canadian study of public health workers found that interpersonal relationships and social and contextual factors influence information seeking in EIP (Yousefi-Nooraie et al., 2014). These studies suggest that practitioner and manager engagement in EIP is a group activity that may reflect prevailing social processes (e.g., the efforts of staff teams) and hierarchical and organizational forces (e.g., the influence and perspectives of key agency stakeholders).

More specifically, scholarship to date on EIP has not investigated the particular cognitive and interactive processes involved in gathering, interpreting, and making use of evidence. Generally, scholarship about critical thinking in social work practice suggests that EIP cognitive processes might involve (a) reframing and challenging assumptions; (b) synthesizing, comparing and evaluating ideas and observations; (c) problem solving; (d) creativity; and (e) critical talk, dialogue, and engagement (Gibbons & Gray, 2004). These critical thinking processes, when situated within a social and organizational context, suggest that evidence-informed managers and practitioners engage in dialogue using agency data and other forms of evidence with colleagues at diverse levels of the agency (i.e., frontline, supervisory, and administrative) and in the service of identifying agency solutions to current practice dilemmas.

To further our understanding of the EIP process as carried out in the daily, agency-situated work of social work managers and practitioners, this qualitative study addressed two central questions: (1) What processes do managers and practitioners in public human service agencies engage in as they work with multiple sources of evidence to inform their practice decisions? and (2) What individual and organizational challenges do managers and practitioners experience as they work with various forms of evidence? Our empirical study presents findings from open-ended questions from an online survey involving responses from 473 individuals, including executives, managers, supervisors, and line staff, in 11 county human service organizations in the San Francisco Bay Area. The findings describe the cognitive, interactive, action, and compliance processes involved in EIP and the organizationally situated challenges related to integrating stakeholder perspectives, developing measurement schemes, and managing resources. EIP emerges as a form of collective action within organizations that is carried out by managerial and direct practitioners through nonlinear and complex processes.

Methods

Sample and data collection

The 11 county social service agencies that participated in this online survey conducted in June–July 2013 are responsible for Child Welfare, Benefits/Public Assistance, Employment Services, and Adults and Aging, with three of the agencies additionally overseeing county health services. They were selected purposively to represent a diverse set of organizations with respect to (a) size (e.g., 350–2,200 full-time-equivalent employees), (b) budget (e.g., \$93 million–\$738 million), and (c) resourcing and structure of research and evaluation functions (e.g., multistaff, stand-alone unit directed by PhD-level researcher compared to individual master's-level analysts assigned to program divisions).

The purposive, nonprobability sample of respondents included staff at the frontline, supervisory, managerial, and executive levels. Email invitations to participate were sent to 958 employees; a total of 497 responded to the online survey that included closed- and open-ended questions, representing an overall 52% response rate, above average for organizationally based employee surveys (Baruch & Holton, 2008). Among these 497 respondents, 473 individuals provided responses to one or more of the open-ended questions, representing a 49% response rate; 24 did not respond to any open-ended questions. With respect to program responsibilities, the largest percentage of respondents worked in Child Welfare (43%), followed by Benefits/Public Assistance/Employment Services (19%), and Adults and Aging (7%). The remainder of the respondents worked in administrative or analyst roles that were not program specific (e.g., fiscal, HR, IT, planning, evaluation) (31%). With respect to work role, a substantial majority of respondents were in managerial positions. The largest percentage of respondents were supervisors (37%), followed by middle managers (28%), executives (17%), frontline staff (9%), and administrative/support staff (6%). Approval for the study was granted by the authors' institutional review board, and consent information was included in the online survey.

The survey sought to understand how human service managers and practitioners use multiple types of evidence, including those generated by performance measurement systems and program evaluations, as well as external research, client perspectives, and professional experience, to inform their practice and enhance services and agency operations. This analysis used qualitative data from open-ended questions related to four domains: (1) ideas for improving client services or agency operations (e.g., What are some recent examples of your thinking about how to improve client services or agency operations, and what are some barriers? [384 respondents]); (2) interest in EIP activities and training (e.g., If you could find time to attend a short program on EIP, why would or wouldn't you be interested in participating? [355 respondents]/Why would or wouldn't you be interested in participating in an evidence request service? [335 respondents]); (3) uses of internal and external sources of evidence (e.g., For what purpose do you use your agency's/program's dashboard or regular reports? [254 respondents]/How else would you investigate reasons for caseload changes? [44 respondents]); and (4) defining and measuring service quality and outcomes (e.g., Describe a challenge you have experienced in your agency related to defining and measuring "service quality" and "client outcomes", and strategies to respond to this challenge [248 respondents]). The length of responses to questions in each of the four domains ranged from partial sentences or phrases to paragraphs of 5 to 6 sentences.

Analysis

Our approach to analysis was consistent with the definition of grounded theory methods proposed by Charmaz (2005): "a set of flexible analytic guidelines that enable researchers to focus their data collection and to build inductive middle range theories through successive levels of data analysis and conceptual development ... that provide tools for analyzing processes" (pp. 507–508). The analysis was carried out in three phases, and integrated multiple coding strategies, consistent with the flexible

approaches to qualitative analysis suggested by Saldaña (2013) and Miles, Huberman, and Saldaña (2014). Coding was carried out by the first author using Dedoose in conjunction with manual-coding methods. Dedoose is a web-based qualitative analysis software application that provides tools for data management and analysis common to computer-assisted qualitative data analysis software (e.g., excerpting, coding, cross-referencing of codes, memo writing and linking, importing of quantitative data for mixed-methods analyses, and visual data displays) (Dedoose, 2016; Gilbert, Jackson, & di Gregorio, 2014; Moylan, Derr, & Lindhorst, 2015). Coding strategies and specific codes were noted and described in analytic memos and were reviewed with co-authors, with memo-sharing and discussion conducted regularly throughout the analytical process (Miles & Huberman, 1994).

The first cycle coding scheme was developed based upon a complete reading of the data, which identified three high level codes: (1) values coding to capture responses related to the importance or value of EIP; (2) descriptive coding focused on concrete activities and processes, with subcodes that identified EIP activities and distinguished them from other practice activities; and (3) coding to capture tensions and challenges associated with EIP (Saldaña, 2013). These codes were then applied to the data in a case-based approach in which data were sorted by respondent.

The second phase of the analysis focused on mapping and conceptualizing the specific processes and activities involved in EIP. An export of all the EIP-activity-coded data was used to create a new document that was loaded into Dedoose. A new subcode, Process Verb, was then created in Dedoose and used to code all action verbs and verb phrases related specifically to EIP activities, excluding activities unrelated to EIP. This process resulted in a list of 807 verbs or verb phrases that were exported into Excel for review and cleaning. The list of verbs was condensed by merging repeat instances and synonyms, and the resulting list of 129 unique verbs was organized in a conceptually ordered matrix that displayed activities under six high-level categories in order to “subsume the particulars into the general” (Miles & Huberman, 1994, p. 129). This matrix was then reviewed and critiqued by the study coauthors, followed by a process of member checking involving review and discussion by 38 supervisors and managers at the 11 participating agencies, the group representing 65% of the survey sample. The lead author presented the matrix to the group, who then spent 20–25 minutes in small discussion groups critiquing the content and organization of the matrix. The small group discussions were reported back to the lead author and the full group, followed by further discussion to develop a unified perspective on the validity of the concepts outlined in the matrix. These critical reflections, grounded in prior research and practice experience, were used to develop a concept map identifying four EIP process domains (described in the next section). Finally, an analysis was conducted to develop an understanding of the relationship between the four EIP process domains as well as the agency-based factors that inform manager and practitioner engagement in EIP. In this stage, using a manual-coding process, the full data set was reviewed and coded with two high-level binary codes, linear/nonlinear and organizational driver/client driver.

Limitations

The purposive organizational and individual samples dictate caution when generalizing findings to other public human service agencies. Further, the data are based upon self-report, and responses may reflect a social-desirability bias toward EIP in the current policy and practice environment. Lastly, while the open-ended survey questions generated a large number of responses, the detail provided by each respondent was limited as noted above.

Findings

Respondents described a broad array of EIP activities in which they use multiple forms of evidence to achieve multiple purposes. They reported engaging in EIP, in order to respond to drivers that reflect organizational as well as client needs, and carrying out EIP activities in multiple, varying sequences. EIP activities clustered in four domains: (1) cognitive processes; (2) interactive processes; (3) action processes; and (4) compliance processes, as depicted in

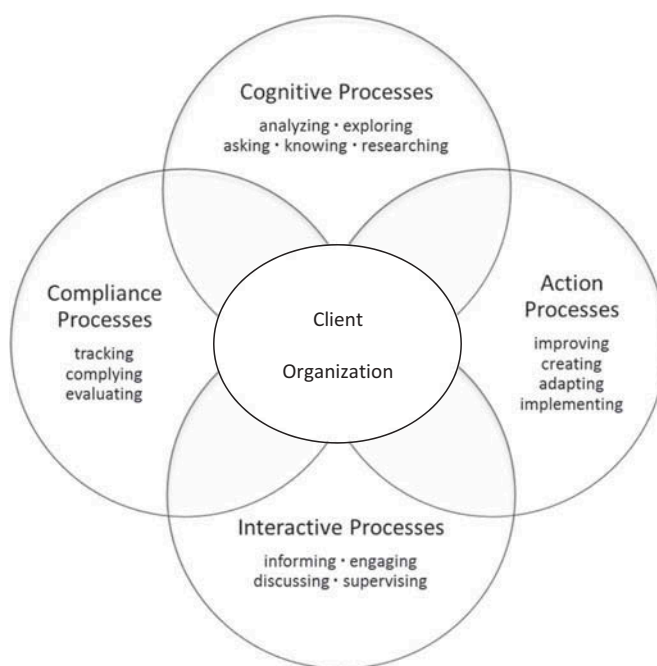


Figure 1. EIP processes.

Figure 1. In the cognitive, interactive, and compliance domains, respondents identified associated challenges; however, they did not describe significant or common challenges associated with the action process domain.

EIP drivers and sequencing

Respondents described a balance between *the primary drivers of EIP—responding to client needs and addressing organizational priorities and challenges*. EIP related to *client needs* included responding to individual clients as well as broader efforts to improve service quality, service targeting, and aggregate outcomes. As a mid-level child welfare manager in a medium-size county agency noted when explaining her interest in attending an EIP program, “[p]roviding EBP’s is paramount in our agency thinking. All our programs are built with this in mind, to protect resources and to target only the highest populations in child welfare.” With respect to *organizational drivers* of EIP, respondents reported multiple aims, including (a) increasing productivity and efficiency; (b) responding to externally imposed mandates and incentives; (c) improving staff morale; and (d) providing opportunities for staff development. Client and organizational drivers of EIP were often described simultaneously, as illustrated by an administrative support staff person in the child welfare division of a small rural county agency who described her interest in an EIP program: “To see what we could do better to improve our service to clients. What can we change to make it a better experience for the families we serve, in addition to providing opportunities for growth for our staff?”

The *four EIP process domains* were described as occurring in multiple, varying stages, rather than as a fixed, linear or cyclical process. For example, monitoring (compliance activity) may follow a sequence in which a service strategy is designed (cognitive process) and implemented (action process) and staff are trained and supervised (cognitive-interactive processes). In another context, monitoring (compliance process) may generate questions and subsequent analyses (cognitive processes), as when one mid-level manager in a large urban county agency’s fiscal division noted that she used the agency dashboard to “see what overall trends look like and identify any questions I

might need to ask depending on what the data is.” EIP activities also occur simultaneously, such as when work teams review data dashboards together (cognitive process) and discuss (interactive process) client trends and staff performance. For example, a mid-level child welfare manager in a large urban county agency noted using a dashboard “to review information with my peers, staff and supervisor about how my program is performing.”

Cognitive processes

Respondents described a series of cognitive processes as central to EIP: (a) *asking*, (b) *exploring*, (c) *researching*, (d) *analyzing*, and (e) *knowing*. The asking process was prominent among respondents’ descriptions of EIP, indicating they formulate a diverse array of questions such as “how to support the move towards unsupervised/community visits” (mid-level child welfare manager) and “how to shorten wait time to complete work requests” (supervisor of administrative support staff). *Exploratory activities* (e.g., looking, searching, and investigating) were common, reflected by an adult and aging supervisor in a large suburban county agency who sought to “hear new ideas and explore how other programs are meeting the needs of the community, effectively.” More systematic *research activities* were also common, particularly reading internal and external materials (e.g., “Read articles about utilizing technology and identify ways to translate into service delivery (child welfare supervisor). Analytical processes were central (e.g., thinking, comparing, analyzing), as illustrated by an executive overseeing public assistance in a large urban county agency who reported s/he would “analyze data re: families waiting for child care subsidies against employment data on unemployment, CalWORKs data, and child welfare data” in order to better understand the reasons for a major change in caseload size. Finally, a less common but important cognitive process involves using evidence to *predict or forecast* (e.g., “track trends, levels of service, determine whether we’re meeting service targets, attempt to forecast future” [member of executive team]). Engaging in these cognitive activities, respondents seek to determine the source of and solutions to current and future needs and problems.

Respondents noted that cognitive processes underlie the development of measures that utilize agency data to inform decision making, raising challenges related to developing accurate logic models, selecting outcomes, and determining appropriate metrics. A number of respondents expressed *concerns about the logic models* underlying the programs and services being delivered, pointing to a disjuncture between service quality and client outcomes. As an employment services supervisor in a large suburban county agency explained, “Services provided may be of high quality, yet outcomes do not reflect that; the same is also possible in reverse.” A child welfare supervisor in a medium size suburban/rural county agency highlighted the challenges associated with developing *accurate models of human behavior*: “Predicting human behavior is very difficult if not impossible. A good quality service is never a guarantee that a client will be successful.” Given the complexity of human services, these practitioners in county human service agencies found it difficult to *define service outcomes and quality*, as noted by an executive in the fiscal division of a small rural county agency: “We constantly struggle with the definition of success and whether the outcome of a case was successful or not.” Respondents also described difficulties with operationalizing the “independent and dependent variables that impact a person’s life and life situation which impact the success and/or the non-success of service delivery” (public assistance executive). As with developing logic models, a central difficulty relates to accounting for client variation in the design of measures to evaluate services. As a child welfare worker in a large urban county agency noted:

Each client came from a different background and they each are from a different playing field, so we cannot expect each client fits our standard measure based on their situation; it would be unfair and unrealistic to expect certain clients and families to fulfill our standard and requirements at certain level and at certain timeline.

Interactive processes

Respondents described relying heavily on interactive processes that involve working with others as they engage in EIP, including *engaging, talking, informing, and supervising*. A substantial majority of respondents proposed interactive strategies when describing actions they would take to address an increase in caseload size. This array of strategies included: (a) internal and external information gathering from colleagues; (b) consultation with peers and experts; and (c) collaborative decision making. *Reaching out to stakeholders and colleagues* was seen as important to determine need and identify and implement promising strategies (e.g., “engage CBOs and possibly our own staff to get trained in trauma informed models that work, such as Dialectical Behavior Therapy for high risk teens and Parent Child Interaction Therapy for parenting coaching” (child welfare executive)). *Providing information* to multiple audiences within and outside the agency was reported to be a very common element of EIP, through formal reporting and training, as well as through informal communication activities. Evidence use is also an important component of *supervision*, used to direct and motivate staff.

Interactions with both internal and external stakeholder groups were described as common in the EIP process, including: (a) agency employees (e.g., line staff, staff in other programs or divisions); (b) community members (e.g., clients, families, community members); (c) professionals (e.g., community service providers, other county agencies, other county human service agencies; and (d) researchers/academics. An executive in the public assistance division of a large urban agency noted that after examining multiple evidence sources, including agency caseload data and regional economic and employment statistics, she would “interview line staff and supervisors in focus group type settings to glean info from the ground on trends. Routinely when there are caseload or demand shifts, this is discussed in statewide meetings to fact check and determine if it is the result of changing practices or policies or if it is unique to our county.”

Respondents described the *significant, complex roles played by stakeholders* in EIP, including generating new ideas to improve practice (e.g., “meeting with staff to solicit ideas how best we can serve our clients with the many changes that impact their lives” [adult and aging executive]). Respondents also emphasized the importance of stakeholder perspectives in defining or conceptualizing outcomes/quality/success. A mid-level manager with cross-division responsibilities in a large urban agency highlighted the importance of incorporating service user input by “allowing our customers to define what high quality service and successful outcomes are,” while a child welfare supervisor in a large suburban agency sought to gain input from multiple stakeholder groups, by using “focus groups of families, staff, and service providers in order to develop measures and ultimately to shape future strategies and practice.” Strategies to gain client perspectives were seen as particularly important when evaluating service quality, including “focus groups or post service contact with clients to ask how well we did and what we could have done better” (administrative support executive). Some respondents spoke of the value of stakeholder perspectives that can aid in interpreting and validating data, including a mid-level child welfare manager in a large suburban agency who described “talking with community providers to see if perceived trends are congruent with reality.” Colleagues and other professionals were the most common source of information about innovative or best practices.

Finally, while incorporating the perspectives of multiple stakeholders in EIP processes was generally viewed as important and useful, by contributing to knowledge or clarifying issues, it also appears to *complicate decision making*, particularly related to measuring and assessing service quality and outcomes. As a mid-level manager in the planning and evaluation division of a medium-size suburban/rural agency noted, “everyone has a different perception of service quality and client outcomes.”

Action processes

Respondents reported that evidence provides the foundation for multiple types of managerial and organizational actions including *implementing, improving, adapting, creating and directing*

(e.g., “act upon the data”; “implement better solutions”; “drive decision making”; “create the most efficient and effective customer service”). An important aim of EIP, as described by participants, relates to *improving agency services and operations through creating and/or adapting* new services, business processes, and measures. As an administrative support supervisor in a medium-size suburban agency observed: “We would use the data to constantly refine and improve our work processes to adapt to client needs, while increasing efficiency and worker satisfaction.” Describing her interest in playing a role in information-sharing activities within the agency, a child welfare supervisor in a medium-size suburban/rural agency explained that she would “see the benefit in engaging in dialogue and training within the department to improve service delivery. Clients would benefit, staff would feel that they are having an effective impact and the agency would likely improve its compliance measures.”

When asked to provide examples of their thinking about how to improve client services or agency operations, many respondents reported engaging in EIP-related activities. For example, a child welfare executive in a large urban agency noted she had “reviewed evidence based practice for working with high needs teens, asked a friend in emergency management for ideas in disaster prep, [and] attended training on my own time to learn EBP for high risk teens.” A child welfare supervisor in the same agency similarly described turning to externally generated research evidence and consulting with experts: “reading national publications about child welfare services; network[ing] outside of work with professionals in related fields.” These examples illustrate the strong link between EIP and active efforts to improve multiple aspects of agency practice, including work processes, client experiences and outcomes, measurement decisions, and worker satisfaction. In contrast to the challenges described by respondents related to cognitive, interactive, and compliance processes, the analysis did not identify responses that described challenges specifically associated with action processes.

Compliance processes

Activities related to complying with federal and state mandates were also common EIP processes described by participants, including *tracking, monitoring, and reviewing data* in order to meet performance standards. Respondents utilized data monitoring for multiple purposes that included: (a) supervision (e.g., “helping [staff] track what has been done and what needs to be done on their caseloads on a weekly basis” [child welfare supervisor]), (b) identification of caseload trends (e.g., “tracking trends such as caseloads size, case types, reunification rates” [mid-level child welfare manager]), and (c) performance reporting (e.g., “track my staff efforts, report out to agency on measures my staff are responsible for and use in decision making processes” [mid-level administrative support manager]). Tracking and monitoring were used to make “daily and strategic decisions” and were typical across agency divisions, including child welfare (e.g., “caseloads, numbers of youth in care, placement types”), welfare benefits (e.g., “use to establish the error rate and trends”), and external reporting by executive teams (e.g., “report to the board [of supervisors]”).

Responses to a question about challenges in measuring service quality and client outcomes highlighted *issues associated with using quantitative data*, including for compliance monitoring. Some participants noted concerns related to what a child welfare executive in a large urban/suburban agency described as the focus on “numbers (nuts & bolts), not the quality of work/engagement social worker is making with family.” While some respondents viewed quantitative data as “easy to capture” (child welfare analyst), others noted that it can be difficult to “get the numbers to be meaningful to line staff” (mid-level planning and evaluation manager). A planning and evaluation executive reported similar difficulties involved in efforts to “engage staff with consistent data collection” in order to provide the data necessary for compliance monitoring. Finally, several respondents described *resource constraints* that can impede using data to inform compliance processes; as a mid-level public assistance manager in a large urban agency explained: “Data need interpretation. Time is a factor in dealing with the abundance of data.”

Discussion

These findings provide insight into the organizationally situated activities of managers and practitioners involved in EIP. Overall, these EIP processes are described as (a) multi-level (e.g., involving frontline staff, supervisors, managers, executives, and analysts); (b) multi-question (i.e., client questions, program questions, planning questions, administrative questions); and (c) driven by multiple organizational goals (e.g., accountability and learning, stakeholder engagement, compliance, and innovation). Specifically, managerial and practitioner engagement in EIP can be organized along cognitive, interactive, action, and compliance dimensions. The *cognitive* processes that inform decision making include asking, exploring, researching, analyzing, and knowing. Each of these elements is rooted in the perspective of “research-mindedness” that includes curiosity about ways to improve practice at different levels of the organization, critical reflection upon one’s practice and how it might inform decision making, and critical-thinking capacities needed to understand, analyze, and interpret evidence (Austin, Dal Santo & Lee, 2012).

The *interactive* processes reflect the interpersonal skills needed to engage, talk, inform, and supervise in organizational settings. Study findings suggest that managers and practitioners do not engage in EIP activities in isolation. Rather, they gather information from, consult with, and engage in collaborative decision making with agency colleagues, community members, and external professionals and researchers. These cognitive and interactive processes operationalize three key elements of EIP identified by Sackett, Straus, Richardson, Rosenberg, and Haynes (1997) nearly 20 years ago—namely, identifying relevant research, drawing upon practice wisdom, and continuously seeking and utilizing the perspectives of service users. They point further to the need to expand the traditional EIP focus on constructing researchable questions derived from one’s own practice to include questions derived from organizational challenges and from the perspectives of others within the agency setting. The findings related to the interactive nature of EIP highlight the social networks through which managers and practitioners engage in EIP within their agencies. We find evidence that individuals working in human service organizations are engaging in complex reasoning and critical thinking in the company of co-workers, clients, and community members. These interactions are organizationally structured in the sense that practitioners and managers are talking with colleagues in their immediate work environments and with other individuals they may encounter through boundary-spanning roles.

The *action* processes described by study participants are aimed at improving multiple aspects of agency practice (e.g., business processes, client service outcomes, service quality and outcome measurement, and staff development and satisfaction). Action processes involve seeking out and using diverse forms of evidence to design, implement and adapt new structures and processes in order to improve program services and operations. In this sense, EIP focused on action can support innovation in response to critical organizational prompts. Innovation often involves learning from others inside and outside the organization, and this learning can be traced to the capacity to engage with the evidence emerging from daily practice (Hargadon, 2002).

In contrast, *compliance* processes are responsive to administrative and funding requirements, involving tracking, monitoring, and reviewing data, in order to demonstrate achievement of performance standards and program fidelity. The focus on fidelity to existing service strategies and compliance with standards based in historical measures of performance may serve to inhibit efforts to innovate. EIP thus emerges in these findings as a tactic to pursue multiple organizational goals, not all of which may be consonant. While one of the purposes of public human service organizations is to demonstrate accountability for public funds received and the quality of the services provided, there is also a growing interest in finding ways to respond to changing client needs. One way for human service organizations to weather turbulent fiscal and policy environments is through innovation in service programs.

These findings point to several implications for practice and research. The importance of interactive processes in EIP indicates that staff development programs need to emphasize skills related to relationship building and maintenance, negotiation, and consensus building in order to support staff efforts to engage diverse stakeholders in EIP. The findings suggesting that EIP in public

human service organizations occurs across multiple levels of organizational hierarchy indicate that senior agency staff may need to develop new forms of communication to support the sharing of data and evidence throughout the organization. Skill development also needs to focus on the cognitive capacity to engage in EIP, including the ability to create logic models and measures of service quality and outcomes. In addition to staff capacity building, collaborative initiatives involving researchers and agency staff can assist in developing meaningful measures of service quality and outcomes that draw upon professional, client, and stakeholder values and expertise. Finally, agency funders and leaders need to do more to ensure that staff members have sufficient time to engage in EIP.

Future research is needed to explore the nature of EIP as a form of collective action inside organizations. To what extent will organizational culture support informal norms, like trust, that may be necessary for promoting participatory forms of EIP? What organizational supports are needed to create open, engaging, and safe spaces to gather and assess complex data? Given the common perception that individuals who work in human services are people oriented and data averse, the dynamic interplay between cognition and interaction also emerges as an important area for exploration. Research is needed to inform strategies that help managers and practitioners engage with evidence in ways that are analytically rigorous and socially interactive. Specific questions include (a) What kinds of materials and communication strategies can support critical reflection on research? (b) How can management or team meetings be designed to help participants examine and interpret agency data as well as use it to guide program and practice decisions? (c) What kinds of processes can effectively engage clients and community members in assessing and interpreting research and agency data? and (d) What kinds of organizational incentives and other tools can serve to make these processes both inclusive and productive?

The findings emphasize dual processes of action and compliance when translating evidence into individual and organizational behaviors, raising the potential for tension between innovation and accountability. Whereas the action processes described by study participants reflect a future-oriented desire to improve service quality and client outcomes, the compliance processes focus on tracking current outcomes and behaviors and ensuring fidelity to existing forms of practice. Given the current accountability environment of public human service organizations, research is needed to examine the effect of compliance-oriented forms of EIP practice on innovation-minded human service managers and practitioners. Important questions relate to understanding individual motivations to innovate, as well as identifying agency factors that promote innovation in the regulation-dominated and resource-limited environment of public human service organizations. Finally, although the findings of this study did not identify significant challenges related to action processes, the study design did not allow for follow-up inquiry, hence, further research exploring this theme might uncover additional challenges.

Conclusion

These findings offer a more comprehensive picture of EIP in daily practice than previous research has provided, illuminating respondents' understanding of EIP and their experiences engaging with diverse forms of evidence within their agencies. The understanding of EIP as a continuous, multi-dimensional process embedded within agency-based social and organizational practices and priorities and conducted at all organizational levels differs substantially from the ESI model that focuses on the implementation of manualized interventions originating outside the agency. It differs similarly from the linear, stepwise model, in which EIP is (a) carried out by individual, isolated frontline practitioners, (b) focused on external research while excluding agency generated data, and (c) limited to addressing individual client problems. This study finds that engagement in EIP may be influenced strongly by organizational demands and goals, rather than staff or service-user interests alone. The findings suggest further that EIP frameworks used in agency settings involve both cognitive and interactive processes, where managers and practitioners engage simultaneously in "critical talk, dialogue and engagement" (Gibbons & Gray, 2004, p. 21; Peake & Epstein, 2005). Finally, findings highlight the potential for tension between compliance- and innovation-oriented aims for individuals and agencies engaged in EIP.

References

- 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), 1–39.
- Barratt, M. (2003). Organizational support for evidence-based practice within child and family social work: A collaborative study. *Child and Family Social Work*, 8(2), 143–150. doi:10.1046/j.1365-2206.2003.00276.x
- Barth, R. P. (2008). The move to evidence-based practice: How well does it fit child welfare services? *Journal of Public Child Welfare*, 2(2), 145–171. doi:10.1080/15548730802312537
- Barth, R. P., Lee, B. R., Lindsey, M. A., Collins, K. S., Strieder, F., Chorpita, B. F., . . . Sparks, J. A. (2012). Evidence-based practice at a crossroads: The emergence of common elements and factors. *Research on Social Work Practice*, 22(1), 108–119. doi:10.1177/1049731511408440
- Baruch, Y., & Holton, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, 61, 1139–1160. doi:10.1177/0018726708094863
- Beddoe, L. (2011). Investing in the future: Social workers talk about research. *British Journal of Social Work*, 41(3), 557–575. doi:10.1093/bjsw/bcq138
- Bellamy, J. L., Bledsoe, S. E., & Traube, D. E. (2006). The current state of evidence-based practice in social work. *Journal of Evidence-Based Social Work*, 3(1), 23–48. doi:10.1300/J394v03n01_02
- Booth, S. A., Booth, A., & Falzon, L. J. (2003). The need for information and research skills training to support evidence-based social care: A literature review and survey. *Learning in Health and Social Care*, 2(4), 191–201. doi:10.1046/j.1473-6861.2003.00054.x
- Brodtkin, E. Z. (2008). Accountability in street-level organizations. *International Journal of Public Administration*, 31, 317–336. doi:10.1080/01900690701590587
- Buckley, H., Tonmyr, L., Lewig, K., & Jack, S. (2014). Factors influencing the uptake of research evidence in child welfare: A synthesis of findings from Australia, Canada, and Ireland. *Child Abuse Review*, 23, 5–16. doi:10.1002/car.v23.1
- California Evidence-Based Clearinghouse for Child Welfare (CEBC). *Information and Resources for Child Welfare Professionals* (2015). Retrieved from <http://www.cebc4cw.org/>
- Charmaz, K. (2005). Grounded theory in the 21st century: Applications for advancing social justice studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 507–535). Thousand Oaks, CA: Sage.
- Collins-Camargo, C. M., Sullivan, D., & Murphy, A. (2011). Use of data to assess performance and promote outcome achievement by public and private child welfare agency staff. *Children and Youth Services Review*, 33, 330–339. doi:10.1016/j.childyouth.2010.09.016
- Cook-Craig, P. G., & Sabah, Y. (2009). The role of virtual communities of practice in supporting collaborative learning among social workers. *British Journal of Social Work*, 39(4), 725–739. doi:10.1093/bjsw/bcp048
- Dedoose. (2016). *Great Research Made Easy*. Retrieved from <http://www.dedoose.com/>
- Epstein, I. (2011). Reconciling evidence-based practice, evidence-informed practice, and practice-based research: The role of clinical data-mining. *Social Work*, 56(3), 284–288. doi:10.1093/sw/56.3.284
- Fisher, M. (2014). The Social Care Institute for Excellence and evidence-based policy and practice. *British Journal of Social Work*, 46(2), 498–513. doi:10.1093/bjsw/bcu143
- Gambrill, E. (1999). Evidence-based practice: An alternative to authority-based practice. *Families in Society: The Journal of Contemporary Social Services*, 80(4), 341–350. doi:10.1606/1044-3894.1214
- Ganju, V. (2006). Mental health quality and accountability: The role of evidence-based practices and performance measurement. *Administration and Policy in Mental Health and Mental Health Services Research*, 33, 659–665. doi:10.1007/s10488-006-0071-1
- Gibbons, J., & Gray, M. (2004). Critical thinking as integral to social work practice. *Journal of Teaching in Social Work*, 24(1/2), 19–38. doi:10.1300/J067v24n01_02
- Gilbert, L. S., Jackson, K., & Di Gregorio, S. (2014). Tools for analyzing qualitative data: The history and relevance of qualitative data analysis software. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of research on educational communications and technology* (pp. 221–236). New York, NY: Springer.
- Gould, N. (2000). Becoming a learning organization: A social work example. *Social Work Education*, 19(6), 585–596. doi:10.1080/02615470020002317
- Gould, N. (2006). An inclusive approach to knowledge for mental health social work practice and policy. *British Journal of Social Work*, 36(1), 109–125. doi:10.1093/bjsw/bch243
- Gray, M., Joy, E., Plath, D., & Webb, S. A. (2012). Implementing evidence-based practice: A review of the empirical literature. *Research on Social Work Practice*, 23(2), 157–166. doi:10.1177/1049731512467072
- Gray, M., Joy, E., Plath, D., & Webb, S. A. (2014). Opinions about evidence: A study of social workers' attitudes towards evidence-based practice. *Journal of Social Work*, 14(1), 23–40. doi:10.1177/1468017313475555
- Hargadon, A. (2002). Brokering knowledge: Linking learning and innovation. *Research in Organizational Behavior*, 24, 41–85. doi:10.1016/S0191-3085(02)24003-4

- Herie, M., & Martin, G. W. (2002). Knowledge diffusion in social work: A new approach to bridging the gap. *Social Work*, 47(1), 85–95. doi:10.1093/sw/47.1.85
- Hodge, D. R., Lacasse, J. R., & Benson, O. (2012). Influential publications in social work discourse: The 100 most highly cited articles in disciplinary journals: 2000–09. *British Journal of Social Work*, 42(4), 765–782. doi:10.1093/bjsw/bcr093
- Horwitz, S. M., Hurlburt, M. S., Goldhaber-Fiebert, J. D., Palinkas, L. A., Rolls-Reutz, J., Zhang, J., ... Landsverk, J. (2014). Exploration and adoption of evidence-based practice by US child welfare agencies. *Children and Youth Services Review*, 39, 147–152. doi:10.1016/j.childyouth.2013.10.004
- Knight, C. (2013). Social workers' attitudes toward peer-reviewed literature: The evidence base. *Journal of Teaching in Social Work*, 33, 177–195. doi:10.1080/08841233.2013.773955
- Lee, J. L., Bright, C. L., & Berlin, L. J. (2013). Organizational influences on data use among child welfare workers. *Child Welfare*, 92(3), 97–118.
- Marsh, P., & Fisher, M. (2008). The development of problem-solving knowledge for social care practice. *British Journal of Social Work*, 38(5), 971–987. doi:10.1093/bjsw/bcm116
- McBeath, B., Briggs, H. E., & Aisenberg, E. (2010). Examining the premises supporting the empirically supported intervention approach to social work practice. *Social Work*, 55(4), 347–357. doi:10.1093/sw/55.4.347505
- McBeath, B., Perez Jolles, M., 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 & Governance*, 33(3), 242–261.
- McCracken, S. G., & Marsh, J. C. (2008). Practitioner expertise in evidence-based practice decision making. *Research on Social Work Practice*, 18(4), 301–310. doi:10.1177/1049731507308143
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage.
- Moylan, C. A., Derr, A. S., & Lindhorst, T. (2015). Increasingly mobile: How new technologies can enhance qualitative research. *Qualitative Social Work*, 14(1), 36–47. doi:10.1177/1473325013516988
- Mullen, E. J., Bledsoe, S. E., & Bellamy, J. L. (2008). Implementing evidence-based social work practice. *Research on Social Work Practice*, 18(4), 325–328. doi:10.1177/1049731506297827
- Nevo, I., & Slonim-Nevo, V. (2011). The myth of evidence-based practice: Towards evidence-informed practice. *British Journal of Social Work*, 41, 1176–1197. doi:10.1093/bjsw/bcq149
- Nutley, S., Walter, I., & Davies, H. T. O. (2009). Promoting evidence-based practice models and mechanisms from cross-sector review. *Research on Social Work Practice*, 19(5), 552–559. doi:10.1177/1049731509335496
- Okpych, N. T., & Yu, J. L. H. (2014). A historical analysis of evidence-based practice in social work: The unfinished journey. *Social Service Review*, 88(1), 3–58. doi:10.1086/674969
- Peake, K., & Epstein, I. (2005). Theoretical and practical imperatives for reflective social work organizations in health and mental health. *Social Work in Mental Health*, 3(1–2), 23–37. doi:10.1300/J200v03n01_02
- Qureshi, H. (2004). Evidence in policy and practice: What kinds of research designs? *Journal of Social Work*, 4(1), 7–23. doi:10.1177/1468017304042418
- Reid, W. J. (2002). Knowledge for direct social work practice: An analysis of trends. *Social Service Review*, 76(1), 6–33. doi:10.1086/324606
- Sackett, D. L., Straus, S. E., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (1997). *Evidence-based medicine: How to practice and teach EBM* (2nd ed.). Edinburgh, Scotland: Churchill-Livingstone.
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (No. 14). Thousand Oaks, CA: Sage.
- Savaya, R., Altschuler, D., & Melamed, S. (2013). Apprehensions and expectations of the adoption of systematically planned, outcome-oriented practice. *Research on Social Work Practice*, 23(4), 437–446.
- Shlonsky, A., & Mildon, R. (2014). Methodological pluralism in the age of evidence-informed practice and policy. *Scandinavian Journal of Public Health*, 42(Suppl. 13), 18–27.
- Sonoma County (2011). *Upstream Investments: Portfolio of Model Upstream Programs*. Sonoma County: CA, USA.
- Sonoma County. (2015). Retrieved from <http://www.upstreaminvestments.org/>
- Thyer, B. A., & Myers, L. L. (2011). The quest for evidence-based practice: A view from the United States. *Journal of Social Work*, 11(1), 8–25. doi:10.1177/1468017310381812
- Webb, S. A. (2001). Some considerations on the validity of evidence-based practice in social work. *British Journal of Social Work*, 31(1), 57–79. doi:10.1093/bjsw/31.1.57
- Yousefi-Nooraie, R., Dobbins, M., & Marin, A. (2014). Social and organizational factors affecting implementation of evidence-informed practice in a public health department in Ontario: A network modeling approach. *Implementation Science*, 9(1), 1–23. doi:10.1186/1748-5908-9-29