The Organizational Context of Research-Minded Practitioners: Challenges and Opportunities

Bowen McBeath School of Social Work and Hatfield School of Government Portland State University

&

Michael J. Austin School of Social Welfare and Mack Center for Nonprofit and Public Sector Management University of California, Berkeley

February 1, 2013

DRAFT SUBMITTED FOR:

BRIDGING THE RESEARCH & PRACTICE GAP SYMPOSIUM IN HOUSTON, TEXAS, ON APRIL 5TH & 6TH, 2013 & REVIEW IN A SPECIAL ISSUE OF RESEARCH ON SOCIAL WORK PRACTICE

For Presentation at "Bridging the Research and Practice Gap: A Symposium on Critical Considerations, Successes, and Emerging Ideas"

Abstract

If some practitioners are more research-minded than others, then promising approaches for bridging the research-to-practice gap may be developed by describing research-minded practitioners and examining how to locate and support them. This paper follows this basic logic in providing an overview of organizational development and practitioner support models for increasing knowledge use in human service organizations. The paper begins with a conceptual profile of research-minded practitioners—individuals with an affinity for empirical inquiry, critical thinking, and reflection allied with a commitment to data-driven organizational improvement—and the organizational settings needed to host research-minded practice. This is followed by a description of the challenges involved in promoting practitioner involvement in using, translating, and doing research and strategies to address these challenges. We conclude with implications for supporting research-minded practitioners and aligning their efforts with organizational improvement processes. The goal of the analysis is to identify the organizational contexts in which research-minded practitioners can thrive as well as new directions for practice research.

My leadership team and I have noticed that there is a subset of line staff who come to work wondering if there is a better way to serve children and families, and who are using academic research and whatever data we have available at our agency to try to figure out how we can improve services. How can I support these workers and grow their numbers?

-- Anonymous county human services director

Efforts to promote the engagement of practitioners in organizational knowledge development coincide with the rise of interest in evidence-based practice to improve human service quality and service user outcomes. These developments are often based on the premise that research-informed practice will improve the reflexivity and professionalism of practitioners despite the accumulation of empirical studies suggesting that frontline and managerial practitioners often have limited support and access to published research (Beddoe, 2011; Epstein, 2010; Chagnon, Pouliot, Malo, Gervais, & Pigeon, 2010; Collins-Camargo, Sullivan, & Murphy, 2011; Rosen, 1994).

Although practitioners may face significant barriers to research engagement (including a lack of time and organizational resources, and limited management support), a small literature is beginning to describe *research-minded practitioners* or *practice researchers* (Beddoe & Harrington, 2011; Shera & Dill, 2012). This analysis focuses on these individuals, who have "a capacity to critically reflect on practice to develop researchable questions, a capacity to be informed by knowledge and research related to social work values, and a capacity to understand research designs and related methodologies in order to theorize about practice" (Austin, Dal Santo, & Lee, 2012, p. 176) and who engage in research using available data to improve their understanding of their own practice and organizational service delivery strategies (Shaw & Lunt, 2011). At the same time, scholars have begun to develop organizationally-focused models for increasing knowledge use in human service organizations and for understanding the factors that

¹ These terms are used interchangeably in this manuscript.

facilitate the research involvement of practitioners (Aarons, Hurlburt, & Horwitz, 2011; Nutley, Walter, & Davies, 2009; Trocme, Milne, Laurendeau, & Gervais, 2011).

From an organizational development perspective, research-minded practice can be viewed as a form of frontline and managerial activity that, as with program evaluation and other data-focused efforts designed to improve frontline practice and service user outcomes, may be enhanced through the provision of select organizational supports. The use of data for the improvement of human service organizations has reflected models developed in the for-profit and public sectors (e.g., continuous quality improvement, performance management) (Briggs & McBeath, 2009; Lynch-Cerullo & Cooney, 2011; McBeath, Briggs, & Aisenberg, 2009). In these models, research is used to identify promising practices and organizational data are mined to identify inefficiencies and improve standard operating procedures, often with the goal of routinizing service delivery processes. However, there is little explicit attention in these models to individual practitioners or the factors that promote their involvement in research. In contrast, research-minded practice involves practitioner-focused processes that draw on multiple attributes (e.g., creativity, critical thinking, curiosity, and skepticism-based inquiry) needed to engage practitioners in organizational learning that addresses critical service user-focused questions. The core components of these processes have not yet been described, and there has been little overall attention to the organizational context of practice research (Alexanderson et al., 2009; Julkunen, 2011; Leung, 2009).

This analysis is a response to this knowledge gap in order to locate research-minded practice within an organizational context (i.e., aligning practice research efforts with organizational improvement processes). The analysis begins with a conceptual profile of research-minded practitioners—individuals with an affinity for empirical inquiry, critical

thinking, and reflection allied with a commitment to data-driven organizational improvement—and the organizational settings needed to host research-minded practice. This section is followed by a description of the challenges involved in promoting practice research and strategies to address them. It concludes with implications for understanding and enhancing research-minded practice within the context of limited empirical study of practice research and its exploratory nature. The goal is to identify the organizational contexts in which research-minded practitioners can thrive as well as new directions for practice research.

The Organizational Context of Research-Minded Practice

The evidence-based practice literature has focused primarily on explicating the strengths and challenges associated with different research-to-practice and knowledge sharing processes designed to improve service delivery and service user outcomes (Austin, Claassen, Vu, & Mizrahi, 2008). Evidence-based practice approaches reliant on randomized controlled trial data encourage practitioners to select and rigorously implement interventions whose efficacy in clinical settings has been tested and supported (Barth et al., 2012). In contrast, the evidence-informed practice model encourages practitioners to draw on and integrate various streams of knowledge into individual decision-making, including service user preferences, clinician experience and practice wisdom, and the best available scientific evidence (Mullen, Bledsoe, & Bellamy, 2008; Rubin & Parrish, 2011; Parrish & Rubin, 2011). Despite their differences, these two models share a common focus on knowledge application but not knowledge production.

The process of research-minded practice involves practitioners engaged in research within human service organizations, often to address pressing service delivery questions. While such involvement may draw on the use and application of research, practitioners may also engage in producing and sharing research. As suggested by Fielding, Crawford, Leitman, &

Anderson (2009), "Practitioners experience themselves as knowledge makers not just knowledge takers in their everyday work" (p. 164). This level of proactive engagement in practice-based research is one of the factors that distinguishes research-minded practice from other evidence-based practice processes.

Research-Minded Practitioners

Research-minded practitioners can provide leadership in promoting organizational knowledge development processes by: identifying practice-based research needs; proposing methods to meet these needs through the analysis of existing and emergent data as well as academic research; marshaling resources to support and spearhead practice improvement initiatives through data mining; and serving as boundary spanners between the organization and outside researchers and translators of scientific literature. Available scholarship has sought to describe the role of practice researchers in terms of their attributes, approach to practice, and approach to research.

A preliminary set of core attributes of a research-minded practitioner include curiosity, critical thinking, and critical reflectivity (Austin, Dal Santo, & Lee, 2012). These attributes can be seen in: 1) an unwillingness to rely on status quo explanations; 2) an ability to use knowledge from a variety of sources (e.g., from service users, coworkers, thought-leaders, and researchers) to address researchable questions; 3) an interest in learning for the purpose of organizational improvement (as opposed to simply benefiting oneself); 4) the ability to seize on uncertainty and ambiguity to actively question and experiment; and 5) a capacity to critically engage in understanding how practice informs research and how research informs practice (including how theory informs practice and how practice informs theory development) (Ruch, 2007; Shaw & Faulkner, 2006). These attributes help practitioners make connections between the explicit

knowledge found in practice manuals and guidelines and the tacit knowledge derived from self-reflection and critical thinking that is often so essential for knowledge development and sharing (Trevithick, 2008; Wilson, 2011).

These personal qualities can facilitate the search for and testing of promising practices and expand understanding and retooling of practice models (e.g., via testing, modification, adoption, and/or diffusion). These behaviors can be seen through the metaphor of "practice puzzles" (Shaw & Lunt, 2011, p. 1555) that help to focus the curiosity and analytical abilities of research-minded practitioners in order to identify alternatives to practice situations that have significant meaning for service users and co-workers. In short, research-minded practitioners reflect an impatient curiosity by asking "Why do we do this this way?" and "How do we do this better?" as they seek to promote service-focused knowledge development (Ruch, 2005). Since research and practice are conjoint processes for practice researchers (Ruch, 2002), research may also be used to further the investment of practitioners in praxis; namely, by exploring the indeterminacy, ambiguity, and complexity embedded within organizational practices (Parton, 2000; Taylor & White, 2006).

Organizational Supports for Research-Minded Practice

The organizational setting for research-minded practice refers to the nature of the research being undertaken in relation to its embeddedness within the human service task and technical environment (Hasenfeld, 1983). The organizational setting for research-minded practice is important because it influences the activities being undertaken by practice researchers and other agents, including coworkers, service users, and external researchers. Practice research may also reflect (or reject) the dominant organizational orientation to research, practice, service delivery, and worker roles and responsibilities, each of which may be affected by past and/or

current resource dependencies and the overall institutional context (Hasenfeld, 2010). While the settings for practice research may vary across organizations and practice research initiatives, they are also likely to share certain common characteristics.

Little empirical research has sought to describe the organizational settings in which practitioners develop their critical research capacities and inhabit a researcher role. There is an expanding literature on the organizational qualities facilitating the adoption and diffusion of evidence-based practices (Aarons, Hurlburt, & Horwitz, 2011; Palinkas & Soydan, 2012; Smith & Manfredo, 2011). However, studies of evidence-based practice may reflect a restrictive (rational-technical) research-to-practice process focused on intervention development, selection, adoption, and maintenance that may be constrained by the highly regulated nature of the service technology and the requirement of funders and which may therefore limit the relevance of this literature for understanding the practice research context (Taylor & White, 2006; Wilson, 2011). It is open to question whether the organizational context and adoption of evidence-based practice resembles the range of formal and informal settings in which practice research is situated. For example, practice researchers may view mandates associated with evidence-based practice as authoritarian and research on evidence-based practice as artificial and of limited relevance to practice concerns (Beddoe, 2011; Collins-Camargo, Sullivan, & Murphy, 2011; Otto, Polutta, & Ziegler, 2009).

Concerns about artificiality and relevance among research-minded practitioners may reflect distinctions between "academic" research (often understood to be authoritatively-based, causally-focused, and discipline-bound) and "practitioner" research (Nowotny, Scott, & Gibbons, 2001). Shaw and Faulkner (2006) noted in their case studies of 42 UK practice research projects that academic research is seen as "evidence-based, detached, structured, larger-

scale, and rigorous" and practitioner-led research is seen as "evidence-based, interactive, experiential, understanding-focused, valid, real-world, and deep" (p. 58). This finding parallels the use of data mining to address practice questions (Epstein, 2010) where organizations are continuously generating researchable practice questions (Beddoe, 2011; Rehr, Rosenberg, Showers, & Blumenfield, 1998). These studies suggest the potential for meaningful, small-scale, and practitioner-led research across different organizational settings.

With regard to the settings for research-to-practice initiatives, Nutley, Walter, and Davies (2009, pp. 555-556) present three models: 1) the research-based practitioner model, where autonomous practitioners are responsible for initiating and developing individual practice research while they balance their research efforts with practice responsibilities; 2) the embedded research model, where groups of practitioners have internal or external incentives to report agency data, engage in research production, and/or use research for practice; and 3) the organizational excellence model, which aligns human service organizations with universities and research centers to promote research development. These models help to delimit the range of settings in which practice research may occur, and suggest that the organizational context of any practice research initiative may vary according to its embeddedness in formal organizational structures and processes. If formalized by organizational policies and practices, research initiatives may be built deliberately into operational structures and may benefit from organizational commitments, staff with dedicated research responsibilities, and budgetary support. In contrast, less embedded practitioner-led research efforts may be afford less organizational prominence and may require substantial ad hoc organizational supports to be sustained, particularly if they are led by solitary practitioners.

Organizational settings for research-minded practice may also differ depending on

whether the host agency is aligned with a *learning organization* framework (Austin, 2008; McBeath, Briggs, & Aisenberg, 2009). As applied to research-minded practice, learning organizational frameworks derived from Senge (1990) may provide hospitable settings for knowledge sharing and development, particularly if managerial commitments to exploration, counterfactual thinking, and critical inquiry are allied with a development and testing framework for service delivery innovation (Maynard, 2010; Sabah & Cook-Craig, 2010). In these settings, practice research initiatives may benefit from and contribute to organizational engagement in research and experimentation. In addition, research-minded practitioners may be supported by the development of communities of practice that foster teamwork, continuous and shared learning, and the coordination of organizational goals (Beddoe, 2009; Orme & Powell, 2007; Wenger, 1998). These team-based learning opportunities are not limited to formal trainings but are ideally interwoven into organizational and staff practices and thus provide regular opportunities to enhance learning in core practice domains (Westerberg, Hjelte, Brannstrom, & Hyvonen, 2011).

In summary, the success of a particular practice research initiative in attaining its organizational goals may reflect its embeddedness within formal organizational structures, the comprehensiveness of its mandate and sufficiency of its resources, and its relationship to the broader organizational culture. While these formal and informal differences in the organizational setting for practice research should matter, it is less clear how the context of practice research can be shaped to promote research-minded practice. How can human service organizations support the efforts of research-minded practitioners as organizational innovators?

Facilitating Research-Minded Practice

Since research is often viewed by practitioners as arcane, distant from practice concerns,

and/or foisted on staff by funders and accrediting bodies, research-minded practitioners may be engaged in activities that are of little interest to others. In addition, as research use and reflective practice have been associated with considerable professional uncertainty and anxiety, practice researchers may perceive themselves to be (and may be viewed by others as) isolated and unsupported (Beddoe, 2011; Beddoe & Harrington, 2011; Maschi et al., 2007; Ruch, 2011; Shaw & Lunt, 2011). For these reasons, while the incidence of research-minded practitioners within human service organizations has yet to be established, it is plausible to hypothesize that research-minded practice may be a low-occurrence event and practice researchers may be uncommon (Shaw & Faulkner, 2006).

Challenges in Supporting Research-Minded Practitioners

Human service organizations face a variety of challenges in supporting the efforts of practice researchers in accessing, using, and/or developing research. These knowledge barriers may originate outside the organizational context (e.g., fiscal-institutional challenges that may limit openness towards research, experimentation, and organizational learning) or may be related to internal factors (e.g., organizational culture and climate, leadership and management, workforce, and social support factors) that may diminish support for practitioner research (Aarons & Sawitzky, 2006; Aarons, Hurlburt, & Horwitz, 2011).

Human service organizations seeking to promote practice research may confront the following three types of *institutional* barriers. First, funding/accountability requirements may require staff to document organizational practices using performance metrics established by funders, accrediting bodies, or others (Broadhurst, Hall, Wastell, White, & Pithouse, 2010; Moynihan & Pandey, 2010). Practitioners generally view this reporting as onerous and unrelated to their personal-professional objectives, particularly as it is often organized by administrators

with little practitioner involvement (Carilio, Packard, & Clapp, 2003). The second institutional barrier to research-minded practice is the lack of overt requirements and incentives to engage in data-driven program experimentation (Testa & Poertner, 2010). As expressed through purchase of service contracts, public funding mechanisms normally discourage model testing and largely reimburse providers for delivering services based on prespecified, contractually approved program models (Smith, 2012). Finally, the routinization of practice may impact the involvement of practitioners in knowledge building efforts. Bureaucratization may reduce organizational discretion to propose and test novel research-to-practice initiatives and may create barriers to research-related professional development (Aarons, Cafri, Lugo, & Sawitzky, 2012; McDonald, Postle, & Dawson, 2008).

Within human service organizations, *organizational cultures and climates* that resist research and experimentation create barriers to evidence-based practice as well as knowledge development and sharing (Aarons, 2005; Aarons & Sawitzky, 2006; Beddoe, 2011; Collins-Camargo, Sullivan, & Murphy, 2011). In addition, organizations that are unable to demonstrate a clear focus on evidence (in mission statements, strategic plans, and operational program planning that highlight agency-based knowledge use and development processes prominently) may be unable to support organizational learning. Some degree of risk exists for organizations seeking to promote practice research; and those with "defensive cultures", as noted by Aarons and Sawitzky (2006, p. 62), will need to find new ways to support practice research, especially when its costs and benefits are difficult to calculate in advance.

Leadership and management support for research-minded practice is critical, since managers are often the champions of data-driven programmatic and organizational change (Beddoe & Harrington, 2011; McDonald, Postle, & Dawson, 2008; Ruch, 2007). Managers

seeking to promote organizational learning are often called on to create reflective spaces for practice research in order not to isolate research-minded practitioners. Managers are instrumental in preserving organizational and professional boundaries relevant to research-minded practitioners by clarifying: 1) service delivery goals and processes; 2) the value of service user-focused assessment and data collection techniques; and 3) the value of data reporting related to the purpose of organizational programs (Austin, Dal Santo, & Lee, 2012).

The final two intra-organizational barriers to knowledge use and development relate to workforce and network development. With regard to workforce development, practitioners may need time, additional training, and/or support to engage in research initiatives, particularly when these initiatives are viewed by other staff as irrelevant to practice and part of their existing work responsibilities (Maschi et al., 2007). Social support network development for research-minded practice involves the formation of communities of practice or networks of like-minded practice researchers that create organizational spaces to critically examine practice issues (Ruch, 2007, 2011). The challenge is to overcome the traditional notion of research as the primary domain of academic researchers rather than a shared domain in which highly-engaged practitioners collaborate with others inside and outside of their organizations to address pressing organizational questions.

Navigating Organizational Challenges to Research-Minded Practice

If research-minded practice is important, then systematic efforts need to be made to cultivate research-minded practitioners and support their efforts within different organizational contexts. Few knowledge development interventions have been tested empirically²; and few theoretical frameworks have been proposed describing expected effects and mechanisms of

² For exceptions, see Aarons, Sommerfeld, & Walrath-Greene (2009) and Trocme, Milne, Laurendeau, & Gervais (2011).

change resulting from different practice research supports. In the absence of such research, scholars have focused on explicating basic research support strategies such as increasing interactions between practitioners and researchers and facilitating the research access and involvement of practitioners (Mullen, Bledsoe, & Bellamy, 2008; Nutley, Walter, & Davies, 2009). These supports may be found at the individual, group, and organizational practice levels and across the five interrelated domains previously noted (i.e., institutional, organizational culture and commitment, leadership and management, workforce readiness and development, and social support network formation). Figure 1 summarizes these five sets of support strategies for research-minded practice and the barriers to practice research they address. We presume that the relative effects of these strategies—either individually or in combination—will depend on their responsiveness to the underlying barriers to practice research as well as the overall organizational setting for practice research.

[Figure 1 About Here]

Institutional supports for practice research are designed to shift default notions of field-based research from "research for reporting" towards what might be termed "research for organizational development and social advocacy". This latter form of research is not only focused on demonstrating accountability for the expenditure of public and private funds and in compliance with legislative requirements but is also concerned with improving service quality and service user well-being, often via enhancing organizational capacity around program evaluation (Raymond, 2010). In contrast with the top-down nature of knowledge generation commonly used in "research for reporting", attention is paid to the development of multistakeholder engagement strategies in which diverse groups organize to gather, analyze, and disseminate agency-based data. In this context, data-based organizational learning is

participatory, designed to reduce hierarchies within and across organizational settings, and focused on supporting progressive alternatives to status quo service delivery approaches.

Two types of institutional strategies may facilitate practice research for organizational development and social advocacy. First, the development of interorganizational research networks may provide off-site research infrastructure for human service organizations, particularly those that are unable to enhance their research capacity because of resource limitations. These networks may take different organizational forms, including formal consortia anchored by research centers (Anthony & Austin, 2008; Manion, Buchanan, Cheng, Johnston, & Short, 2009; Shera & Dill, 2012), agency-university collaborations related to research and training (McEwen, Crawshaw, Liversedge, & Bradley, 2008), and/or project-based affiliations with external researchers. These interorganizational linkages may facilitate knowledge sharing by connecting human service organizations with key research-related supports and repositories and by diffusing start-up costs for practice research initiatives. Such ties may be most supportive of research-minded practitioners if they are able to reduce the ambivalence of practitioners towards academic research, support diverse methods of knowledge development and mobilization, and promote service user involvement in research (Orr & Bennett, 2012; Shaw & Faulkner, 2006).

Second, policymakers and funders may stimulate the market for practice research by incentivizing agency-based experimentation (e.g., using performance contracts or other economic incentive-based systems to promote innovative program development). Because marketization may create the conditions for perverse incentives (e.g., cherry picking, creaming) as well as isomorphism (e.g., copy-catting, homophily) (Dias, 2012; Hasenfeld & Garrow, 2012), experimentation-focused fiscal systems may need to focus initially on promoting the

development and testing of novel program models as opposed to the selection of established evidence-based practices or the achievement of performance milestones. As human service providers test and refine new practice approaches and performance incentives are introduced into service contracts, the overall number of practice innovations being tested can increase.

Cultural and climate-based strategies for promoting research-minded practice seek to mobilize human service organizations towards "constructive cultures" characterized by openness towards innovation and attention to practitioner professional development (Aarons & Sawitzky, 2006, p. 62; Franklin & Hopson, 2007, p. 390). Agencies may develop and/or modify formal structures and routines and informal norms and expectations to facilitate practice research. The following illustrate formal strategies:

- Investing in research infrastructure through the creation of a dedicated R&D unit with practice researcher positions (separate from evaluation staff), interorganizational research linkages, and practice research development opportunities (Alexanderson et al., 2009; Julkunen, 2011).
- Formalizing a focus on innovation by developing a position of chief innovation officer (or chief creativity officer). Vesting this person with leadership of continuous quality improvement where specific performance metrics are focused on how staff at different levels use research, experiment, take risks, engage in professional development, and contribute to other processes deemed essential for organizational innovation in order to strengthen an overall commitment to practice research.
- Requiring clinical data mining (Epstein, 2010) prior to making major programmatic or service delivery decisions (along the lines of environmental impact statements).
- Holding competitions for staff to design innovative program models and program

improvement processes.

Informal strategies promoting research-minded practice can include the deliberate development and maintenance of intraorganizational support networks, often anchored by staff who serve as practice-research boundary spanners. These "knowledge brokers" and "link officers" may help connect staff to research resources, coordinate training efforts, disseminate practice research opportunities, and lead research initiatives (Austin, Dal Santo, & Lee, 2012; Research in Practice, 2006; Trocme, Milne, Laurendeau, & Gervais, 2011). Organizations can also help establish and/or reinforce norms around organizational learning by devoting space to understanding success and failure. For example, if conducted in a manner that seeks to understand critical processes as opposed to assign blame, critical case and organizational reviews (often reflecting aspects of "after action reviews" developed by the U.S. Army) can demonstrate organizational commitment to thoughtful reflection and improvement (Cepuran & Callahan, 2009; Rzepnicki & Johnson, 2005).

In contrast to top-down managers who are dismissive of data-driven organizational learning efforts, *research-minded leaders* can model essential practice research attributes of curiosity, reflectivity, and critical thinking. Learning organization frameworks benefit from participatory processes in which leadership is sought at all organizational levels and where managers clearly support ongoing research (Aarons, Sommerfeld, & Walrath-Greene, 2009; Franklin & Hopson, 2007). As noted by Epstein (2010), "There is little question in my mind that the success of every prior clinical data-mining project has depended on the financial, structural, and symbolic support that program administrators, managers, and supervisors have provided" (p. 72). Managers also help to articulate and advance arguments around research-minded practice if they are able to develop cross-agency feedback loops (e.g., between service delivery and

evaluation; between administrative and frontline levels) that integrate organizational efforts to support the development and testing of promising service models. In practice, managers may reinforce research-mindedness by doing and facilitating research: they may serve as research-based "first responders" by taking the lead in answering emerging practice concerns and cultivating practice research through staff supervision (Orme & Powell, 2007; Ruch, 2007).

Leaders and managers also play an essential role in facilitating research-minded practice through *workforce development* processes of staff selection and development. Staff recruitment processes can include the identification of practitioners with research potential as well as practice competency. Hiring for creativity and innovation potential, openness to change, and attitudes towards research and evidence-based practice may also assist in developing overall organizational competence around practice research (Aarons, Cafri, Lugo, & Sawitzky, 2012; Patterson, Kerrin, & Gatto-Rouissard, n.d.; Sutton, 2003).

Staff development strategies designed to promote research-minded practice can facilitate the overall research engagement and critical reflexivity of practitioners (McDonald, Postle, & Dawson, 2008). While there are many curricula for enhancing practitioner research engagement (Beddoe & Harrington, 2011; Research in Practice, 2006; Trocme, Milne, Laurendeau, & Gervais, 2011), these staff development strategies generally promote knowledge access and use as opposed to knowledge development. If job descriptions are redeveloped to emphasize research-related responsibilities, managers can provide all staff with training in practice research that promotes bicultural identity formation in both practice and research (Nutley, Walter, & Davies, 2009).

For these staff selection and development strategies to be effective, staff need to be supported with time, resources, and autonomy to cultivate research-based service projects and

acquire practice research expertise in ways they find relevant to their professional aspirations. Human service organizations may develop and sponsor practice research sabbaticals so that practitioners can explore researchable questions in partnership with research mentors. Short-term (e.g., month-long) sabbaticals focused on assessing current practices may be less expensive than hiring external organizational consultants, and may yield positive results in terms of developing practice research expertise and promoting staff retention. Rotations in which practitioners are placed in different divisions and are trained in new service delivery approaches (analogous to clinical rotations in general medical education) may help to promote creativity and critical exploration through cross-pollination. By a similar logic, the duties of a knowledge broker and link officer could be rotated periodically to promote organization-wide opportunities for innovation and thereby decrease the isolation of practice researchers.

Social support-based strategies for promoting research-minded practice derive from interactive and facilitative processes of knowledge use and can be supported at the group or individual levels (Nutley, Walter, & Davies, 2009). As with the development of interorganizational networks, human service organizations may provide intra-organizational support for practice research by organizing staff into learning communities (Julkunen, 2011). If given action-oriented mandates and sufficient resources, communities of practice may serve essential functions by providing "mutual engagement, joint enterprise, and shared repertoire" (Sabah & Cook-Craig, 2010, p. 1001). These teams may be organized around specific practice initiatives, fields of practice, and/or research interests. Other social support processes may be more interpersonal in nature and tailored to impact practitioners through their relationship with supervisors. These include supervisory models drawing on praxis-focused techniques to promote practitioner reflexivity through the development of and response to researchable questions

(Alvesson, Hardy, & Harley, 2008; Cunliffe, 2004; Kondrat, 1999).

Moving Towards Research-Minded Organizational Development

The social work profession is in the early stages of understanding the organizational context of research-minded practice. In this section, a brief agenda for future research and practice highlights potential paths for understanding and enhancing research-minded practice. How do we incorporate research into human service organizational settings? How do we define and identify research-minded practitioners? How do we design and develop practice research efforts that are equally valuable for service users, practitioners, and organizations? How do we redefine organizational goals so as to use research to transform practice collaboratively? These questions could anchor a normative framework in which the typical human service organization becomes a type of practice university exploring essential practice questions using diverse research methods, evaluating service delivery and outcome data continuously, creating safe spaces to foster dialogue involving competing perspectives and welcoming non-traditional partners (e.g., service users), and using research to inform practice and advocacy. This orientation to experimentation and debate is based on the value of increasing requisite variety for developing innovative organizational processes, managerial and frontline practice modalities, and service delivery models (Weick, 1979).

<u>Implications for Research</u>

Figure 2 outlines a research agenda that focuses on understanding and enhancing the organizational setting for practice research. The figure summarizes a series of interrelated and progressive research topics in which descriptive studies and methodologically-focused inquiry support the development of more sophisticated research and provide scientific support for the design and testing of interventions promoting research-minded practice. We offer some

elaboration on the figure and, in particular, its attention to basic research, advanced research, and intervention research designed to illuminate and answer key practice research questions.

[Figure 2 About Here]

Basic Research. This type of research can provide essential information on the attributes and practice research activities of research-minded practitioners, especially drawing connections between practitioner curiosity, critical self-reflection, and practice efforts (Otto, Polutta, & Ziegler, 2009). Studies could also document practitioner perspectives on knowledge development, including their mindfulness in using and producing research to benefit practice as well as identity issues and challenges related to spanning the boundaries between practice and research.

Studies of research-minded practice and practitioners can use participatory action research methods that promote practitioner engagement and gather data unobtrusively and delicately. To evaluate how practice research interrelates with organizational change processes and how practice researchers operate as agents of frontline and organizational change, different research approaches may be need to sensitively address the potentially contested processes of change under examination. For example, research-minded practice may in some organizational settings be hidden from overt view by practitioners who disapprove of academic research and/or may not be comfortable discussing their research activities. In these settings, researchers need to use participatory frameworks to support practitioner research efforts and utilize non-stigmatizing language that normalizes practice research challenges (Epstein, 2010). Piloting these techniques and documenting their utility within different organizational settings may inform the development of methods needed to study other contested organizational and practitioner processes.

Advanced Research. Based on an understanding of the organizational context of research-minded practice, it should be possible to see how differences in organizational settings may covary in interesting and important ways with regard to the attributes of practice researchers and processes of research engagement. Research-minded practitioners in bureaucratic organizations may fear being discovered with regard to their research ability and critical thinking skills in contrast to those in learning organizations who may be more supported in taking risks in evaluating practice. Studies of the interplay between the personal sphere of research-minded practitioners and the organizational environment can be informed by conceptual models of the structural determinants of knowledge production. For example, organizational rules, norms, and expectations found in the overt and covert incentive structures embedded within formal policies and funding, interorganizational alliances, and linkages to different normative bodies (e.g., institutions of higher learning, accrediting bodies) can be expected to influence how organizations and practitioners use and develop knowledge (DiMaggio & Powell, 1983; Hasenfeld, 1983). In essence, practice research efforts may reflect formal requirements from funders and policymakers as well as informal but nevertheless strongly felt pressures from other sources (e.g., public and private service providers, service users). Such theoretically-informed studies can be used for both description and prediction related to how research-minded practitioners respond to different organizational supports and environments.

With respect to evaluating the potential impacts of practice research, Trocme and colleagues (2011) present a rich set of indicators related to research, service, policy, and societal outcomes of knowledge mobilization processes. Other salient outcome domains concern critical identity formation, as research-minded practice may be hypothesized to enhance critical thinking, ability to engage with diverse forms of knowledge, and understanding of practice and

meta-practice (i.e., thinking about how we think about practice). How the process of research-minded practice unfolds, and how and why research-minded practitioners impact organizational practices and outcomes, are questions that reflect practitioner- and organizationally-focused developmental processes and which may benefit from longitudinal studies. Other questions also involving the analysis of change over time include: What is the nature of this type of leadership identity formation?; How do we gauge the progression of critical thinking?; and, What forms of professional development are needed to support practitioners at different stages of research engagement and learning? Finally, research-minded practice may be hypothesized to have cascading effects on practitioners, other staff, service delivery, and other key processes (e.g., R&D and evaluation), particularly as research-minded practitioners respond to organizational challenges to or facilitators of practice research. Outcome studies may therefore capture processes of change over time and across organizational strata by incorporating the perspectives of multiple reporting agents at different levels of analysis and across diverse settings.

Intervention Development and Testing. Organizational support strategies facilitating research-minded practice are complex organizational interventions (Ling, 2012). Regardless of their specific goals, scope, components, or implementation methods, these strategies are designed to respond to the barriers that impact knowledge development and sharing within complex organizational settings and identify and impact practitioners who generally are not expected to use research. Researchers may use rigorous quantitative and qualitative methods to describe these interventions, identify the processes used to implement them, and test their impacts across different organizational settings. Intervention research may therefore benefit human service organizations and researchers by providing opportunities to link research to practice as well as facilitate learning in critical areas. The concluding section of this analysis

focuses on promising strategies for enhancing research-minded practice.

Implications for Practice

Our suggestions for social work practice fit within a growing literature helping human service organizations build knowledge sharing systems to support evidence-informed practice (e.g., multidimensional performance dashboards). Top-down and outside-in research-to-practice models, as exemplified by the RCT-based evidence-based practice model, are increasingly familiar to practitioners. What remain largely unelaborated are bottom-up participatory processes that help practitioners engage in creative, rigorous, and relevant explorations of the academic literature and organizationally-bounded administrative and case record data. These inside-out models are designed to help practitioners express research-related agency and develop practice research identities by engaging in research; and, as a whole, challenge the assumption that practitioners are passive and empty receptacles for externally-produced research.

As human service organizations seek to improve performance and innovativeness through frontline service delivery (Lynch-Cerullo & Cooney, 2011), practitioners and organizations should benefit by modifying management information systems to make them more useful for answering practice questions (Carrilio, 2005; Stipp & Kapp, 2012). Developing coherent strategies to integrate practice researchers and practice research within different settings may necessitate attention to how human service organizations spur innovation and model development (Cronley & Patterson, 2012). In organizational environments where research expertise is equivalent to practice expertise and where evidence-informed practice facilitates both clinical and managerial decision-making, research-minded practitioners can feel supported and even unexceptional.

Even when they are integrated into supportive organizational settings, practice

researchers may face challenges in understanding and managing their practice and research roles, particularly as their understanding of research deepens. Research-minded practitioners may struggle to balance different research roles, including: using external research and internal administrative and service user record data for the purpose of knowledge generation; and engaging in sense-making and knowledge translation to use research findings to change organizational service delivery strategies. Attending to the dual roles of "doing research" and "consuming research" while remaining attuned to practice may be particularly challenging if practitioners are not given time and support to develop and refine their understanding of these multiple identities. It may also be difficult to develop interconnections between various research and practice roles when these are viewed as distinct and unrelated, as seen in the traditional dichotomization of practice and research in social work education (Austin, Dal Santo, & Lee, 2012).

The specific process through which research-minded practitioners mature into their diverse roles is unclear but may resemble the stages of change model of research-minded practice summarized in Figure 3. Critical transitions in the development and integration of practice researchers into organizational settings include the translation of core practitioner attributes of curiosity, critical reflection, and critical thinking into: the capacity to engage in practice research for the purpose of experimentation and service innovation; the capacity to inform practice improvement through research development and translation; the capacity to translate outcomes of practice research improvement efforts to benefit organizational development; and the capacity to collaborate in the service of informing system improvement strategies and theory development. These transitions reflect developmental growth that may be facilitated through the application of formal and informal organizational supports and also denote

the potential importance of practice researchers for facilitating organizational and systemic change.

[Figure 3 About Here]

Towards the Design and Testing of Strategies for Supporting Research-Minded Practice. Human service organizations may need to rethink traditional paradigms of scientific research and human service provision if they are to provide suitable environments for practice researchers to inform organizational learning (Nowotny, Scott, & Gibbons, 2001; Nutley, Walter, & Davies, 2009). Such rethinking may involve exploration of current understandings of and alternatives to practice and research that focus on identifying opportunities for cross-cultural communication and co-developed practice knowledge development. Questions that may motivate this exploration include: 1) What opportunities exist to bridge the culture of practice and the culture of research within this organization as well as the culture of research within this organization and that of external researchers?; 2) How might our organization collaborate with service users to develop, evaluate, refine, and disseminate new service approaches?; 3) Could we shift our understanding of our organization so that its focus becomes a "design lab" for the creative exploration and testing of progressive approaches to practice?; 4) While exploring the value of research for service delivery and organizational improvement, how do we remain committed to using and producing research illuminating the relational and collaborative foundations of practice knowledge?; and 5) How might our practice and research be informed by theory and also inform praxis-based theory development and refinement, particularly as applied to organizationally-embedded and context-connected practice knowledge (Blackler, Crump, & McDonald, 2000; Engestrom, Miettinen, & Punamaki, 1999)?

This line of inquiry leads to questions about how human service organizations can

cultivate cross-cultural and co-production linkages between practice and research at the practitioner and organizational levels. Descriptions of organizational models supporting practice researchers and promoting the systematic use of evidence appear to be coming disproportionately from outside the U.S. (e.g., Research in Practice, 2006; Trocme, Milne, Laurendeau, & Gervais, 2011; Westerberg, Hjelte, Brannstrom, & Hyvonen, 2011). These models attempt to balance the use of management tools (e.g., logic models, strategic planning frameworks) with social constructivist-based processes that provide multidimensional (i.e., institutional, cultural, managerial, workforce, and social network) supports to help practitioners use and share research and navigate their practice and research roles. A promising aspect of these early models is their attention to organizational issues. Organizationally-focused strategies foster collective as opposed to individual practitioner engagement around research by embedding research within core service delivery processes (as opposed to sequestering research within remote niches (e.g., "evaluation departments")) and by developing networks of practitioners, supervisors, and managers to share leadership of research efforts.

This is not to suggest that practitioner-focused training strategies, such as those that seek to develop research competency via consultations with external researchers or classroom-based research coursework, are not useful. Nor is this line of reasoning supportive of the development of interventions that promote purely institutional and organizational approaches to facilitating research-minded practice. As new frameworks for supporting practice researchers are developed, we see promise in the development of multilevel support models that (at the practitioner level) aim to reduce the distance between practice and research by enhancing access to, engagement with, and development of research and that (at the organizational level) use research to enhance learning around key service user and service outcomes. Examples of hybrid

approaches that combine practitioner training with research-focused organizational development include:

- Training cohorts of practitioners to do practice research and, upon graduation, placing them as link officers in research-intensive service settings and/or granting them leadership over practice research initiatives (Shaw & Lunt, 2011).
- Simultaneously initiating a management institute focused on promoting practice research for organizational learning purposes while asking self-identified researchminded practitioners to recruit their managers and other key allies in support of the development of a practice research network (Beddoe & Harrington, 2011).
- Providing targeted sabbaticals for practitioners to work with managers, external researchers, and service users to ensure the frontline relevance of performance measurement and clinical data collection processes (Austin, Dal Santo, & Lee, 2012).

We also see value in synchronizing organizational support strategies with the practice research developmental processes summarized in Figure 3. Research-minded administrators may facilitate the transition from practitioner characteristics to capacities by bringing potential practice researchers together in learning communities that allow participants to explore ideas creatively without the need for immediate knowledge application. Seminar-based exploration of alternatives to practice, research skill development, and analysis of organizational data can be used to promote practice wisdom and enhance practitioner reflexivity.

Once research-minded practitioners are prepared for action and as illustrated on the bottom of Figure 3, human service organizations may promote practice research experiential education and ongoing learning through the development and use of different R&D laboratories that anchor organizational efforts around practice innovation, performance management,

organizational improvement, and knowledge transfer. Research-minded practitioner involvement in these laboratory settings is envisioned as sequential, such that less experienced practice researchers may gain seasoning through frontline R&D projects that prepare them to lead R&D efforts involving larger organizational functions. Initially, administrators may promote practice research capacity building and reinforce organizational commitment to experimentation by authorizing small task forces to design service and/or operations innovation projects for discussion, possible funding, and implementation. Research-minded practitioners with sufficient experience and competency in frontline practice research may be invited to participate in outcome measurement R&D projects led by administrative (e.g., IT) and program staff. These outcome measurement activities may involve practitioners in developing taxonomies of outcomes across major service delivery areas with the goal of enhancing overall performance management through the use of data dashboards.

More advanced practice researchers may be integrated into organizational improvement processes by partnering with senior administrators and program staff to translate "lessons learned" from the practice innovation and performance management laboratories into organizational policies and processes (through policy development and implementation as well as budget analysis). Practice researcher development in this stage may also involve evaluation of whether the mission and strategic initiatives of the organization adequately address emerging social problems and promote positive community change. Finally, research-minded practitioners being prepared for leadership roles may be tasked with coordinating and translating major findings from all R&D efforts into new practices (via the development of training materials and curricula) that can be shared across organizations in a service delivery area. These systemic knowledge transfer efforts are envisioned as being relevant for understanding how theory

informs practice and vice versa, and may lead to opportunities for advanced education for those research-minded practitioners who wish to further develop their own research competencies and pursue new practice research questions.

Conclusion

We conclude by re-emphasizing the importance of multilevel research-minded practice support strategies that formalize the roles of practice researchers as essential contributors to important organizational processes, develop collaborative research networks that bridge external/academic and internal/practitioner approaches to knowledge development and utilization, and foster an inclusive atmosphere for practitioners to use research for experimentation. To bridge the research-to-practice gap through knowledge development, utilization, and sharing, human service organizations may need to provide research-minded practitioners with opportunities for professional development by situating them in settings in which their talents are used and their efforts contribute to organizational learning. However, the organizational rationale for developing and promoting research-minded practitioners need not rest solely on integrating research and practice, as practice researchers may also be hypothesized to improve organizational development routines by ensuring that organizational structures and processes are informed by analysis of diverse data. Regardless of their goals and design, practice research support initiatives should reflect a variety of perspectives around research, foster transformative learning at the intersections of practice and research, promote the development of simple and useful research projects, and invite collaboration with service users in understanding emancipatory practice contexts. These interventions should be studied so as to describe their essential change processes and their impacts on service users, practitioners, service delivery processes, and organizations.

References

- Aarons, G.A., & Sawitzky, A.C. (2006). Organizational culture and climate and mental health provider attitudes toward evidence-based practice. *Psychological Services*, *3*, 61-72.
- Aarons, G.A. (2005). Measuring provider attitudes toward evidence-based practice:

 Consideration of organizational context and individual differences. *Child and Adolescent Psychiatric Clinics of North America*, 14, 255-271.
- Aarons, G.A., Cafri, G., Lugo, L., & Sawitzky, A. (2012). Expanding the domains of attitudes towards evidence-based practice: The Evidence Based Practice Attitude Scale-50.

 **Administration and Policy in Mental Health, 39, 331-40.
- Aarons, G.A., Hurlburt, M., & Horwitz, S.M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health*, 38, 4-23.
- Aarons, G.A., Sommerfeld, D.H., & Walrath-Greene, C.M. (2009). Evidence-based practice implementation: The impact of public versus private sector organization type on organizational support, provider attitudes, and adoption of evidence-based practice. *Implementation Science*, 4, 83-97.
- Alexanderson, K., Beljer, E., Bengtsson, S., Hyvonen, U., Karlsson, P.-A., & Nyman, M. (2009). Producing and consuming knowledge in social work practice: Research and development activities in a Swedish context. *Evidence & Policy*, *5*, 127-139.
- Alvesson, M., Hardy, C., & Harley, B. (2008). Reflecting on reflexivity: Reflexive textual practices in organization and management theory. *Journal of Management Studies*, 45, 480-501.
- 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*, 287-293.
- Austin, M.J. (2008). Strategies for transforming human service organizations into learning organizations: Evidence-based practice and the transfer of learning. *Journal of Evidence-based Social Work*, 5, 469-596.
- Austin, M.J., Claassen, J.B., Vu, C.M., & Mizrahi, P. (2008). Knowledge management:

 Implications for the human services. *Journal of Evidence-Based Social Work*, 5, 361-389.
- Austin, M.J., Dal Santo, T.S., & Lee, C. (2012). Building organizational supports for research-minded practitioners. *Journal of Evidence-Based Social Work*, 9, 174-211.
- Barth, R.P., Lee, B.R., Lindsey, M.A., Collins, F., Strieder, F., Chorpita, B.F., Becker, K.D., & Sparks, J.A. (2012). Evidence-based practice at a crossroads: The timely emergence of common elements and common factors. *Research on Social Work Practice*, 22, 108-119.
- Beddoe, L., & Harrington, P. (2011). One step in a thousand-mile journey: Can civic practice be nurtured in practitioner research? Reporting on an innovative project. *British Journal of Social Work, 41*, 1-20.
- Beddoe, L. (2009). Creating continuous conversation: Social workers and learning organizations. *Social Work Education*, 28, 722-736.
- Beddoe, L. (2011). Investing in the future: Social workers talk about research. *British Journal* of Social Work, 41, 557-575.
- Blackler, F., Crump, N., & McDonald, S. (2000). Organizing processes in complex activity networks. *Organization*, 7, 277-300.

- Briggs, H.E., & McBeath, B. (2009). Evidence-based management: Origins, challenges, and implications for social service administration. *Administration in Social Work, 33*, 242-261.
- Broadhurst, K., Hall, C., Wastell, D., White, S., & Pithouse, A. (2010). Risk, instrumentalism, and the humane project in social work: Identifying the informal logics of risk management in children's statutory services. *British Journal of Social Work, 40*, 1046-1064.
- Carrilio, T.E., Packard, T., & Clapp, J.D. (2003). Nothing in nothing out: Barriers to the use of performance data in social service programs. *Administration in Social Work*, 27, 61-75.
- Carrilio, T. (2005). Management information systems: Why are they underutilized in the social services? *Administration in Social Work*, 29, 43-61.
- Cepuran, J., & Callahan, T.J. (2010). Failure and success: Using the morbidity and mortality process in a social service setting. *Administration in Social Work, 34*, 96-106.
- Chagnon, F., Pouliot, L., Malo, C., Gervais, M.-J., & Pigeon, M.-E. (2010). Comparison of determinants of research knowledge utilization by practitioners and administrators in the field of child and family social services. *Implementation Science*, *5*, 41-53.
- Collins-Camargo, C., 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.
- Cronley, C. & Patterson, D.A. (2012). Does the Organization Matter? A Multilevel Analysis of Organizational Effects in Homeless Service Innovations. *Social Work Research*, *36*, 70-79.

- Cunliffe, A.L. (2004). On becoming a critically reflexive practitioners. *Journal of Management Education*, 28, 407-427.
- Dias, J.J., & Elesh, D. (2012). Structuring performance: Performance contracts, organizational logics, and leadership in welfare-to-work programs. *Social Service Review*, 86, 143-168.
- DiMaggio, P.J., & Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-160.
- Engestrom, Y., Miettinen, R., & Punamaki, R.-L. (1999). *Perspectives on activity theory*. New York: Cambridge University Press.
- Epstein, I. (2010). *Clinical data-mining: Integrating practice and research*. New York: Oxford University Press.
- Fielding, A., Crawford, F., Leitman, S., & Anderson, J. (2009). The interplay of evidence and knowledge for social work practice in a health setting. *International Journal of Therapy and Rehabilitation*, 16, 155-165.
- Franklin, C., & Hopson, L.M. (2007). Facilitating the use of evidence-based practice in community organizations. *Journal of Social Work Education*, *43*, 377-404.
- Hasenfeld, Y. & Garrow, E. (2012). The welfare state, the non-profit sector and the politics of care. *Social Service Review*, 86, 295-322.
- Hasenfeld, Y. (1983). Human service organizations. Englewood Cliffs, N.J.: Prentice Hall.
- Hasenfeld, Y. (2010). *Human services as complex organizations* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Julkunen, I. (2011). Knowledge-production processes in practice research outcomes and critical elements. *Social Work and Society*, *9*, 60-75.

- Kondrat, M.E. (1999). Who is the "self" in self-aware: Professional self-awareness from a critical theory perspective. *Social Service Review*, *73*, 451-477.
- Leung, Z.C.S. (2009). Knowledge management in social work: Types and processes of knowledge sharing in social service organizations. *British Journal of Social Work, 39*, 693-709.
- Ling, T. (2012). Evaluating complex and unfolding interventions in real time. *Evaluation*, 18, 79-91.
- Lynch-Cerullo, K., & Cooney, K. (2011). Moving from outputs to outcomes: A review of the evolution of performance measurement in the human services nonprofit sector.

 **Administration in Social Work, 35, 364-388.
- Manion, I., Buchanan, D.H., Cheng, M., Johnston, J., & Short, K. (2009). Embedding evidence-based practice in child and youth mental health in Ontario. *Evidence & Policy*, *5*, 141-153.
- Maschi, T., Bradley, C., Youdin, R., Killian, M.L., Cleaveland, C., & Barbera, R.A. (2007).

 Social work students and the research process: Exploring the thinking, feeling, and doing of research. *The Journal of Baccalaureate Social Work, 13*, 1-12.
- Maynard, B.R. (2010). Social service organizations in the era of evidence-based practice: The learning organization as a guiding framework for bridging science to service. *Journal of Social Work, 10,* 301-316.
- McBeath, B., Briggs, H.E., & Aisenberg, G.A. (2009). The role of child welfare managers in promoting agency performance through experimentation. *Children and Youth Services Review*, *31*, 112-118.
- McDonald, A., Postle, K., & Dawson, C. (2008). Barriers to retaining and using professional

- knowledge in local authority social work practice with adults in the UK. *British Journal of Social Work*, 38, 1370-1387.
- McEwen, J., Crawshaw, M., Liversedge, A., & Bradley, G. (2008). Promoting change through research and evidence-informed practice: A Knowledge Transfer Partnership project between a university and a local authority. *Evidence & Policy*, *4*, 391-403.
- Moynihan, D.P., & Pandey, S.K. (2010). The big question for performance management: Why do managers use performance information? *Journal of Public Administration Research* and Theory, 849-866.
- Mullen, E.J., Bledsoe, S.E., & Bellamy, J.L. (2008). Implementing evidence-based social work practice. *Research on Social Work Practice*, *18*, 325-338.
- Nowotny, H., Scott, P., & Gibbons, M. (2001). Rethinking science: Knowledge and the public in an age of uncertainty. Cambridge, UK: Polity Press.
- Nutley, S., Walter, I., & Davies, H.T.O. (2009). Providing evidence-based practice: Models and mechanisms from cross-sector review. *Research on Social Work Practice*, 19, 552-559.
- Orme, J., & Powell, J. (2007). Building research capacity in social work: Process and issues. British Journal of Social Work, 38, 988-1008.
- Orr, K. & Bennett, M. (2012). Public administration scholarship and the politics of coproducing academic-practitioner research. *Public Administration Review*, 72,487-496.
- Otto, H.-U., Polutta, A., & Ziegler, H. (2009). Reflexive professionalism as a second generation of evidence-based practice: Some considerations on the special issue "What works? Modernizing the knowledge base of social work". *Research on Social Work Practice*, 19, 472-478.
- Palinkas, L.A., & Soydan, H. (2012). Translation and implementation of evidence based

- practice. New York: Oxford University Press.
- Parrish, D.E., & Rubin, A. (2011). An effective model for continuing education training in evidence-based practice. *Research on Social Work Practice*, 21, 77-87.
- Parton, N. (2000). Some thoughts on the relationship between theory and practice in and for social work. *British Journal of Social Work*, *30*, 449-463.
- Patterson, F., Kerrin, M., & Gatto-Rouissard, G. (n.d.). *Characteristics and behaviours of innovative people in organizations*. London, UK: City University, NESTA.
- Raymond, C. (2010). Improving publicly funded human services: Incorporating capacity building into the contracting relationship between children's services councils and nonprofit organizations. *FIU Electronic Theses and Dissertations*. Paper 297.
- Rehr, H., Rosenberg, G., Showers, N., & Blumenfield, S. (1998). Social work in health care:

 Do practitioners' writings suggest an applied social science? *Social Work in Health*Care, 28, 63-81.
- Research in Practice. (2006). Firm foundations: A practical guide to organizational support for the use of evidence informed practice. Dartington, UK: Research in Practice.
- Rosen, A. (1994). Knowledge use in direct practice. Social Service Review, 68, 561-577.
- Rubin, A., & Parrish, D.E. (2011). Validation of the Evidence-Based Practice Process

 Assessment Scale. *Research on Social Work Practice*, 21, 106-118.
- Ruch, G. (2002). From triangle to spiral: Reflective practice in social work education, practice and research. *Social Work Education*, *21*, 199-216.
- Ruch, G. (2005). Relationship-based practice and reflective practice: Holistic approaches to contemporary child care social work. *Child and Family Social Work, 10*, 111-123.
- Ruch, G. (2007). Reflective practice in contemporary child-care social work: The role of

- containment. British Journal of Social Work, 37, 659-680.
- Ruch, G. (2011). Where have all the feelings gone? Developing reflective and relationship-based management in child-care social work. *British Journal of Social Work*, 1-18.
- Rzepnicki, T.L., & Johnson, P.R. (2005). Examining decision errors in child protection: A new application of root cause analysis. *Children and Youth Services Review*, 27, 393-407.
- Sabah, Y., & Cook-Craig, P. (2010). Learning teams and virtual communities of practice:

 Managing evidence and expertise beyond the stable state. *Research on Social Work Practice*, 20, 435-446.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Shaw, I., & Faulkner, A. (2006). Practitioner evaluation at work. *American Journal of Evaluation*, 27, 44-63.
- Shaw, I., & Lunt, N. (2011). Navigating practitioner research. *British Journal of Social Work,* 41, 1548-1565.
- 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, 204-213.
- Smith, B., & Manfredo, I. (2011). Frontline counselors in organizational contexts: A study of treatment practices in community settings. *Journal of Substance Abuse Treatment*, 41, 124-136.
- Smith, S.R. (2012). Social services. In L. Salamon (Ed.), *The State of Nonprofit America* (2nd ed., pp. 192-221). Washington, D.C.: Brookings Institute Press.
- Stipp, K.F., & Kapp, S.A. (2012). Building organizational knowledge and value: Informed

- decision making in Kansas children's community-based mental health services.

 Community Mental Health Journal, 48, 1-11.
- Sutton, R.I. (2003). Sparking nonprofit innovation: Weird management ideas that work. Stanford Social Innovation Review, 42-49.
- Taylor, C. & White, S. (2006). Knowledge and reasoning in social work: Educating for humane judgment. *British Journal of Social Work*, *36*, 937-954.
- Testa, M.F., & Poertner, J. (2010). Fostering accountability: Using evidence to guide and improve child welfare policy. New York: Oxford University Press.
- Trevithick, P. (2008). Revisiting the knowledge base of social work: A framework for practice.

 British Journal of Social Work, 38, 1212-1237.
- Trocme, N., Milne, L., Laurendeau, C., & Gervais, M.-J. (2011). Evidence-based management in child welfare: A process and outcome evaluation. Montreal: McGill University

 Centre for Research on Children and Families, December.
- Weick, K.E. (1979). The social psychology of organizing. Englewood Cliffs, NJ: Prentice Hall.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge, UK: Cambridge University Press.
- Westerberg, K., Hjelte, J., Brannstrom, J., & Hyvonen, U. (2011). The meaning of a knowledge based organization in Swedish municipal elderly care. *Social Work Education*, 1, 1-20.
- Wilson, G. (2011). Evidencing reflective practice in social work education: Theoretical uncertainties and practical challenges. *British Journal of Social Work*, 1-19.

Figure 1: Potential Challenges to and Supports for Research-Minded Practice

	<u>Challenges</u>	Support strategies
Institutional	 Research is viewed as top-down and irrelevant for practice. No requirements or incentives for experimentation. Little discretion for testing novel practice approaches. 	 Reframe research around its value for social advocacy and organizational development. Incentivize experimentation around model development and testing. Interorganizational network development to promote research infrastructure and knowledge sharing.
Culture and climate	 Lack of learning organizational framework emphasizing experimentation and critical thinking. Defensive, risk-averse culture. 	 Formal: R&D units; chief innovation officers; require clinical data mining; practice research competitions. Informal: strengthen social support networks anchored by link officers; institutionalize critical analysis of success and failure.
Leadership and management	 Managers do not champion practice research or create space for it. Unclear organizational and professional boundaries regarding service delivery, service user assessment, and data reporting. 	 Managers model research-minded practice by doing and facilitating research. Establishment of feedback loops to integrate organizational efforts around model development and testing.
Workforce development	 Practitioner research anxiety. Insufficient time, training, and/or interest in research. Lack of access to relevant, engaging research training and professional development. 	 Recruit staff with high innovation potential and robust research training. Staff trained to be bicultural practitioner-researchers. Practice research requirements added to job descriptions. Sabbaticals and job rotations used to foster reflection and cross-pollination.
Social support	 Lack of support networks and dedicated spaces to reflect on key organizational practices. 	 Provide resources to develop and sustain learning communities, and organize service improvement efforts through them.

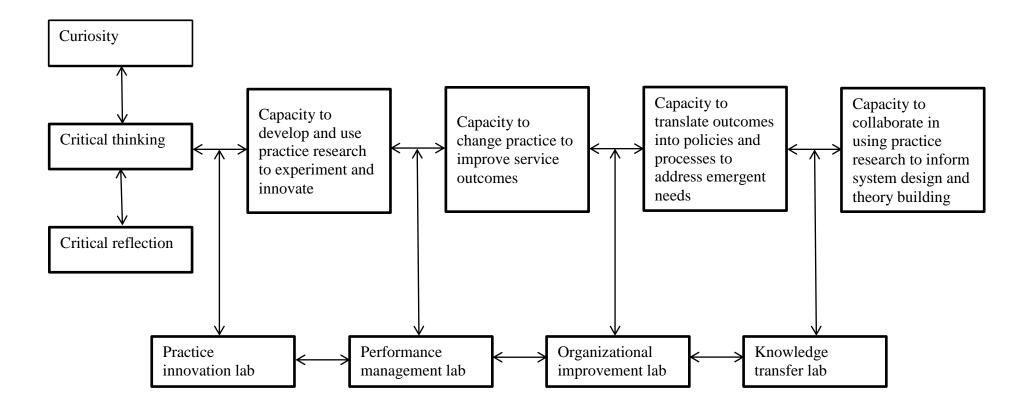
Figure 2: <u>Interlocking Research Domains Supporting Research-Minded Practice</u>

General topic	<u>Purpose of research</u>	
Basic research for identification and	 Documenting the incidence of practice research. 	
description	 Locating research-minded practitioners. 	
	 Describing core characteristics and behaviors of research-minded practitioners. 	
	 Piloting agency-based research methods for studying research-minded practice. 	
Advanced research targeted at	 Developing classification systems for the purpose of typology development and prediction. 	
understanding difference and	 Understanding differences in the organizational settings for practice research. 	
change	 Illuminating moderating and mediating pathways of change in practice research processes. 	
	 Understanding impacts of practice research. 	
	 Modeling change over time in practice research-related learning, efforts, and effects. 	
Intervention research for testing,	 Developing and testing of practice research support strategies either individually or in 	
improving, and diffusing support	combination with other organizational development initiatives.	
strategies	 Comparative effectiveness studies comparing the relative benefits of different interventions. 	
	 Identifying translational mechanisms to support intervention implementation across varied 	
	organizational settings.	

Figure 3: <u>Developmental and Reciprocal Influences of Research-Minded Practitioners in Changing Practice to Improve Services and Inform Organizational Processes and Theory Development</u>

Core Practitioner Attributes

Core Practitioner Capacities and Influences



Core Organizational Development Functions