Many articles have been written on the barriers to and facilitators of the use of evidence in practice in nursing and medicine, but to date no extensive review has been published of the literature on evidence-based practice (EBP) supports in occupational therapy. This article presents the results of a scoping review that examined factors that support the integration of research into practice. A review of 69 articles revealed four themes: (1) attitudes toward, perceptions of, confidence in, and use of research and EBP; (2) factors that support the use of research in practice; (3) effects of interventions targeting changes in knowledge, attitudes, skills, behaviors, and evidence-based practices; and (4) identification of the processes involved in the acquisition of EBP skills and their application in clinical practice. A process that integrates client-centered practice, structured reflection, case application, and peer consultations within a scholarship of practice model facilitates occupational therapists’ evaluation and integration of research evidence.


The terms evidence-based practice (EBP), research utilization (RU), and knowledge translation (KT) emphasize the creation, exchange, and use of knowledge from research findings and from other sources, including colleagues, clinical experience, books, and clients, to influence change in practice and inform clinical decision making (Estabrooks, 1999; Evidence-Based Medicine Working Group, 1992; Straus, Richardson, Glasziou, & Haynes, 2005). Despite the growing status of EBP, compelling evidence indicates that available research findings are not routinely integrated into occupational therapy practice (Cameron et al., 2005; Korner-Bitensky et al., 2006; Philibert, Snyder, Judd, & Windsor, 2003; Salls, Dolhi, Silverman, & Hansen, 2009). Studies have shown that the use of standardized assessments in practice is low (Chard, 2006; Henderson & McMillan, 2002) and that many interventions currently used have poor evidence of effectiveness (Gustafsson & McKenna, 2003; Tempest & Roden, 2008). Few clinicians use professional literature and research findings for clinical decision making (Salls et al., 2009).

The gap between actual occupational therapy practice and EBP has been attributed to many barriers, including a lack of administrative support (Humphris, Littlejohns, Victor, O’Halloran, & Peacock, 2000), lack of dedicated time to search for and incorporate research results into practice (Bennett et al., 2003; Dysart & Tomlin, 2002; Korner-Bitensky et al., 2006), negative attitudes toward research ( Craik & Rappolt, 2003), and lack of confidence and skill in interpreting, synthesizing, and applying research findings (Bennett et al., 2003; Dubouloz, Egan, Vallerand, & von Zweck, 1999; Welch & Dawson, 2006).

Although many articles have been written on the barriers to and facilitators of the use of evidence in practice in nursing (Solomons & Spross, 2011) and medicine (Gray, Haynes, Sackett, Cook, & Guyatt, 1997; Green & Ruff, 2005;
Grol & Grimshaw, 1999), to date no extensive review has been published of the research on KT and EBP supports in occupational therapy. An enriched understanding of the factors that support the uptake of all forms of evidence in occupational therapy practice could promote the development and integration of strategies to increase the use of EBP and could identify areas for future research. This article presents the results of a scoping review conducted to examine individual and organizational factors that support the integration or use of research and other forms of evidence in occupational therapy practice.

Method

A scoping review is a methodology used to rigorously collect, evaluate, and present findings from existing research on a topic (Joanna Briggs Institute for Evidence Based Nursing and Midwifery, 2000). Because of the volume of existing literature in EBP, RU, and KT, the scoping review methodology allowed for a flexible yet comprehensive approach to examining supports for EBP. Using the framework recommended by Arksey and O’Malley (2005), we outline our specific methods in the following sections.

Identifying the Research Question

The research question that guided the scoping review was, What is known from the existing literature about individual and organizational factors that support the integration or use of research and other forms of evidence in occupational therapy practice?

Identifying Relevant Studies and Study Selection

We worked with a medical librarian to conduct searches in Embase, CINAHL, and MEDLINE for studies published from 1996 to 2011 using a combination of key words and MeSH terms such as supports, barriers, system/organizational issues, perceptions, knowledge, skills, attitudes, knowledge translation, knowledge translation strategies, practice development, scholarship of practice, educational intervention, practitioners, occupational therapy, and practice. A first search was conducted in MEDLINE. A second search in CINAHL and Embase was completed using a modified MEDLINE search. Searches of those databases, in addition to hand searches of seminal articles, ensured that different key words and MeSH terms captured all the relevant articles.

Selecting Inclusion and Exclusion Criteria

Original research studies that examined the use of evidence in clinical practice, that described the aspects or factors of the person (e.g., knowledge, skills, attitudes, practice style) and the organization (culture, system, frameworks) that support and promote the use of evidence, and that were written exclusively for occupational therapy were included in the review. Studies using quantitative, qualitative, and mixed-methods designs were included. Syntheses of existing evidence were excluded, as were theory, review, and commentary articles.

Charting the Data

We developed a data charting form to record the following information for each study: author, year of publication, location of the study, purpose of the study or research question, practice setting, methodology, population characteristics, intervention, outcome measures, results, implications for practice, limitations, and directions for future research. Critical appraisal of selected articles is not a requirement of the scoping review methodology. For the purposes of our study, we were interested primarily in the breadth of the literature and the major areas of research activity and corresponding themes. We therefore did not critically appraise the articles.

Collating, Summarizing, and Reporting the Results

We used an analytical framework of quantitative (numerical) and thematic analysis to examine and combine study findings (Arksey & O’Malley, 2005). The numerical analysis highlighted the nature and distribution of the studies (year of publication, country, methodology, and area of practice). For the thematic analysis, and given our research question, study purpose and major findings were the primary units of analysis. We extracted the most common research questions across the studies that met the inclusion criteria and identified the major themes emerging from the findings, with a focus on EBP and KT in occupational therapy and enablers or supports of EBP. Summarizing the results was an iterative process, and once the themes were generated, the first author (Thomas) went back to all the charting tables to confirm that they corresponded to the themes that had been generated. A summary of the major findings organized under each theme was produced after several iterations.

Findings

The searches yielded 804 articles: 548 in MEDLINE, 89 in CINAHL, 120 in Embase, and 47 from hand searches of key articles. An initial screening of the 548 abstracts in MEDLINE using the MeSH terms and inclusion and exclusion criteria resulted in the rejection of 342 articles.
that did not meet the inclusion criteria. The first author then screened the remaining abstracts in MEDLINE (206), and this step resulted in a final list of 95 articles. The second author (Law) read 20% \( (n = 58) \) of the abstracts from CINAHL \( (n = 89) \) and MEDLINE \( (n = 206) \). Agreement between the authors regarding study selection was 90%. During data charting by the first author, 26 articles were excluded because they did not include a research component; that is, they did not report results of original research. The final number included in the review was 69 articles (for a full list of references, contact Ailiki Thomas).

**Numerical Analysis**

Regarding year of publication, 61 of the 69 studies were published from 2003 to 2011. With the exception of 2004, 2007, and 2008, the number of publications increased steadily each year. The United States, Canada, and the United Kingdom produced the most articles (14, 14, and 17, respectively). Half of the studies (36, or 52%) used a quantitative design; 23 of the 36 (64%) reported results of self-administered surveys and questionnaires. Twenty-six studies used qualitative methods; 5 were action research studies. In 26 studies, the authors identified the setting by client population or condition (e.g., mental health, hand therapy, multiple sclerosis), whereas 19 articles mentioned type of practice setting (e.g., home care, community, short-term rehabilitation). Nineteen articles (28%) reported results of studies conducted on a combination of practice areas, conditions, or client populations.

**Thematic Analysis**

Analysis of the study objectives and research questions revealed four major themes:

1. Attitudes toward, perceptions of, confidence in, and use of research and EBP
2. Factors that support the use of research in practice
3. Effects of interventions targeting changes in knowledge, attitudes, skills, behaviors, and evidence-based practices
4. Identification of the processes involved in the acquisition of EBP skills and their application in clinical practice.

**Theme 1.** Attitudes toward, perceptions of, confidence in, and use of research and EBP varied across articles. Some authors perceived EBP as too narrow and overly prescriptive (Curtin & Jaramazovic, 2001), whereas others viewed it in a positive light (Copley, Turpin, & King, 2010) and as beneficial when it was congruent with existing practices (Poiratas, Durand, Côte, & Tousignant, 2011). A noticeable progression toward more positive attitudes occurred from 2002 onward (Bennett et al., 2003; Brown, Tseng, Casey, McDonald, & Lyons, 2010; Cameron et al., 2005; Karlsson & Törnquist, 2007). Studies by Bennett et al. (2003) and Welch and Dawson (2006, 2007) showed that practitioners' confidence in their ability to critically appraise published research and integrate evidence into practice was low.

Professional experience was considered an important source of evidence (Bennett et al., 2003; Copley & Allen, 2009; Humphris et al., 2000). In addition, the client was key in the decision-making process and was found to be an important source of “evidence” (Bennett et al., 2003; Copley & Allen, 2009; Craik & Rappolt, 2006). Studies by Bennett et al. (2003), McKenna et al. (2005), and Philibert et al. (2003) highlighted that practitioners seldom used research evidence as a source of information for decision making. Clinicians consulted colleagues, relied on clinical experience and continuing professional development opportunities (Bennett et al., 2003; Copley et al., 2010; Humphris et al., 2000; Philibert et al., 2003), joined journal clubs, and consulted textbooks when available in their setting (Lyons, Brown, Tseng, & McDonald, 2010; McKenna et al., 2005). Three main studies on participation in and implementation of research showed that clinicians viewed these activities as time consuming and demanding but also as rewarding (Craik & Rappolt, 2006; Finlayson, Shevil, Mathiowetz, & Matuska, 2005; Welch & Dawson, 2006). A perceived lack of skill in critical appraisal and in moving from critical appraisal to integrate evidence into practice was identified in studies by Cameron et al. (2005) and Salls et al. (2009).

**Theme 2.** Factors that support the use of research in practice were categorized as related to the individual or to the organization (Table 1). Among factors related to the individual, academic degree was the strongest predictor of research use (Brown et al., 2010; Brown, Tseng, McDonald, & Lyons, 2009; McCluskey, 2003) and was associated with positive attitudes toward EBP (Brown et al., 2010; Groth, 2011). Positive attitudes toward EBP were associated with increased use of evidence in practice. Postprofessional training was associated with more confidence in one’s ability to adopt EBP (Bennett et al., 2003), to search for evidence, and to generate clinical questions (Bennett et al., 2003; Dysart & Tomlin, 2002). Sweetland and Craik (2001) showed that less time since graduation predicted increased use of higher levels of evidence. Supervising students (Craik & Rappolt, 2006), working in specialized teams (Hammond & Klompouhauer, 2005; Rappolt, Pearce, McEwen, &
Polatajko, 2005), working in a hospital environment (Petzold et al., 2012), having professional autonomy (Vachon, Durand, & LeBlanc, 2010b), and using clinical practice guidelines (Curtin & Jaramazovic, 2001; Poitras et al., 2011) were all associated with increased use of evidence in practice. Karlsson and Törnquist (2007), Petzold et al. (2012), and Poitras et al. (2011) found that clinicians favored high-quality, synthesized research summaries and information that was relevant to their practice context. Participation in research projects was associated with greater use of research in practice in studies by Brown et al. (2010) and Finlayson et al. (2005), and the doing of research was contingent on having adequate support, clear role expectations, and adequate research training (Finlayson et al., 2005). Action research activities with colleagues of similar backgrounds and an expert facilitator were associated with increased participation in research and a greater likelihood of using research to inform practice (Forsyth, Duncan, & Summerfield-Mann, 2005; Forsyth, Melton & Summerfield-Mann, 2005; Welch & Dawson, 2006; Wimpenny, Forsyth, Jones, Matheson, & Colley, 2010). In these studies, collaborations between clinicians, researchers, and clients, described as taking place within a scholarship of practice model, were seen as fostering optimal conditions for EBP and RU.

Copley and Allen (2009) and Copley et al. (2010) found that clinical experience influenced whether and how the evidence was used in clinical decision making. The longer occupational therapists were in practice, the less skilled they were in conducting appraisals of research.

Table 1. Individual and Organizational Factors That Support the Use of Research in Practice or EBP

<table>
<thead>
<tr>
<th>Factors Supporting Use of Research</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Factors</td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>Motivation Tenacity Dissatisfaction with current practice Interest in establishing best practices</td>
</tr>
<tr>
<td>Preferences</td>
<td>High-quality synthesized research Relevant information for the practice context Evidence that is congruent with current practice Multiple uses for the evidence</td>
</tr>
<tr>
<td>Academic degree, level of education achieved, and postgraduate training</td>
<td>More favorable attitudes in master’s graduates toward integration of research in practice Increased confidence with increased training</td>
</tr>
<tr>
<td>Nature of work and work responsibilities</td>
<td>Student supervision Work in specialized teams Work in a hospital environment Professional autonomy Availability of clinical practice guidelines Presence of roles such as coordinator</td>
</tr>
<tr>
<td>Participation in research</td>
<td>Positive experiences with research Adequate support and research training Clear role expectations Availability of action research projects Availability of expert facilitator to guide research Collaboration with colleagues and researchers Formal links with universities, national associations, and mentoring programs</td>
</tr>
<tr>
<td>Knowledge and skills</td>
<td>Knowledge of health conditions Knowledge of and skill in using outcome measures Knowledge of EBP tools</td>
</tr>
<tr>
<td>Confidence</td>
<td>Higher confidence in new graduates and practitioners with postprofessional training</td>
</tr>
<tr>
<td>Level of experience</td>
<td>More experience associated with less use of research</td>
</tr>
<tr>
<td>Organizational Factors</td>
<td></td>
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<tr>
<td>Systems-level support</td>
<td>Organizational paradigm shift toward reduction of barriers</td>
</tr>
<tr>
<td>Leaders and employers</td>
<td>Positive attitudes and readiness for change Openness to unforeseen benefits of changing practices Transformative leadership style Support for Reflective practice Collaborative learning Student supervision Contractual requirements</td>
</tr>
</tbody>
</table>

Note. CPD = continuing professional development; EBP = evidence-based practice.

Polatajko, 2005), working in a hospital environment (Petzold et al., 2012), having professional autonomy (Vachon, Durand, & LeBlanc, 2010b), and using clinical practice guidelines (Curtin & Jaramazovic, 2001; Poitras et al., 2011) were all associated with increased use of evidence in practice.

Karlsson and Törnquist (2007), Petzold et al. (2012), and Poitras et al. (2011) found that clinicians favored high-quality, synthesized research summaries and information that was relevant to their practice context. Participation in research projects was associated with greater use of research in practice in studies by Brown et al. (2010) and Finlayson et al. (2005), and the doing of research was contingent on having adequate support, clear role expectations, and adequate research training (Finlayson et al., 2005). Action research activities with colleagues of similar backgrounds and an expert facilitator were associated with increased participation in research and a greater likelihood of using research to inform practice (Forsyth, Duncan, & Summerfield-Mann, 2005; Forsyth, Melton & Summerfield-Mann, 2005; Welch & Dawson, 2006; Wimpenny, Forsyth, Jones, Matheson, & Colley, 2010). In these studies, collaborations between clinicians, researchers, and clients, described as taking place within a scholarship of practice model, were seen as fostering optimal conditions for EBP and RU.

Copley and Allen (2009) and Copley et al. (2010) found that clinical experience influenced whether and how the evidence was used in clinical decision making. The longer occupational therapists were in practice, the less skilled they were in conducting appraisals of research.
Participation in action research increased the use of research in practice and led to concrete products and knowledge that could be used in practice (Crist, 2010; Egan et al., 2004). Qualitative studies by Finlayson et al. (2005) and Vachon, Durand, and LeBlanc (2010a) found that involvement in research resulted in practitioners’ ideas being challenged and perspective changes that ultimately supported changes in practice. Forsyth, Melton, & Summerfield-Mann (2005); Suarez-Balcazar, Martinez, and Casas-Byots (2005); and Wimpenny et al. (2010) found that clinicians’ involvement in research as part of the scholarship of practice model promoted best practice.

Studies examining the effects of specific KT interventions have indicated that both single- and multi-component KT interventions led to improvements in knowledge about obesity and the potential role of occupational therapists (Forhan & Law, 2009), about available outcome measures (Cook, McCluskey, & Bowman, 2007), and about EBP concepts such as posing a clinical question and appraising scientific articles (McCluskey & Lovarini, 2005). Other practice changes included increased use of outcome measures (Cook et al., 2007; McQueen, 2008), improvements in self-efficacy in using research in practice (Crist, 2010; Petzold et al., 2012), a more client-centered approach to practice (Finlayson et al., 2005; Rappolt et al., 2005), and more favorable attitudes toward EBP (Lysack, Lichtenberg, & Schneider, 2011; Petzold et al., 2012). The use of a research lead or research resource person in clinical practice settings resulted in increased confidence and focus in practitioners, helped overcome barriers to EBP, and increased research outputs (McQueen, 2008).

Theme 4. Identification of the processes involved in the acquisition of EBP skills and their application in clinical practice was a fourth theme. Studies examined the experiences with research use and EBP of therapists considered elite or expert on the basis of extensive clinical experience, peer nomination, postprofessional qualifications, or professional awards (Copley et al., 2010; Craik & Rappolt, 2003); these expert clinicians classified some information as “foreground” (e.g., information about each client in his or her context) and other information as “background” (e.g., information from textbooks and journals, professional development activities) in making clinical decisions. In the context of evidence-based decision making, foreground knowledge was used first and as a priority when judging the value and applicability of more scientific sources of knowledge (background information). Moreover, professional and personal experience expanded expert clinicians’ unique body of knowledge over time. Experiential learning, case application, peer consultations, mentoring
of students, and professional skill development increased these clinicians’ RU capacity (Melton et al., 2010, 2011).

Reflection and reflective practice were key constructs in the development of EBP skills found in studies by Lowe, Rappolt, Jaglal, and McDonald (2007); Vachon et al. (2010b); and Wimpenny, Forsyth, Jones, Evans, and Colley (2006). Through guided reflection, clinicians enhanced their ability to assess areas of strength and areas in need of further development and to change aspects of their practice as a result of “thinking with theory” (Wimpenny et al., 2006, p. 423). Practice-based collaborative learning groups that promoted reflection were shown to increase competence and confidence in using research (Welch & Dawson, 2006).

**Discussion**

The purpose of this scoping review was to examine existing literature on the enablers of EBP and RU in occupational therapy practice. The findings point to an interesting and perhaps necessary trajectory. Although earlier articles examined attitudes toward integration of research into practice and identified supports and enablers of EBP, more recent studies have measured the effects of KT strategies. The most recent literature (2010–2011) has attempted to uncover how and under what circumstances EBP skills develop, reflecting a move toward a greater interest in understanding complex learning processes.

Several individual and organizational enablers of EBP and RU were identified. Clinicians’ attitudes toward EBP were positive and associated with increased use of evidence in practice; attitudes toward EBP have clearly evolved in the past few years. The rising attention to EBP in the literature, in the academic environment, and at policy levels, along with the upgrading of professional qualifications, may have had an impact on raising awareness of EBP, which in turn may have led to more favorable attitudes. Lack of confidence in appraising and implementing research continues to deter occupational therapy practitioners from engaging in EBP. Although research summaries and practice guidelines may be favorable alternatives, they cannot be used as a standalone strategy. A recent Cochrane review showed that compared with no intervention, printed educational materials slightly improved the behavior of health care professionals but not patient outcomes. The review could not ascertain under what circumstances and contexts these materials were more effective or what specific characteristics of the materials made them more effective (Giguère et al., 2012).

Postgraduate training was associated with greater use of research in practice, more positive attitudes toward research, and greater confidence in one’s EBP skills. This finding is consistent with studies of physical therapists showing that academic preparation in the principles of EBP appears to distinguish high-level users of research and to increase self-efficacy and performance of three EBP behaviors: (1) online searching, (2) reading of the research literature, and (3) use of research evidence in clinical decision making (Salbach, Guilcher, Jaglal, & Davis, 2009; Salbach, Jaglal, Korner-Bitensky, Rappolt, & Davis, 2007). These findings are noteworthy on two accounts. First, with the upgrade of the entry-level professional credential to a master’s degree, new generations of occupational therapists may have more positive attitudes about, knowledge of, and confidence in using EBP than previous generations of therapists. Second, seasoned clinicians who have not received explicit instruction on EBP can benefit from upgrading their education on EBP through postprofessional training and CPD. Indeed, a 2009 systematic review of 81 trials evaluating continuing education activities revealed that educational meetings alone or combined with other interventions improved professional practice and patient achievement of treatment goals, even though effects were small (Forsetlund et al., 2009).

Our findings show that for the most part, clinicians believe that evidence includes more than research. Typically, they consider experience first and relative to the existing research and the client’s wishes and expectations (Copley et al., 2010). Expert clinicians are deliberate in their use of the evidence. They make decisions regarding how to integrate the evidence by connecting current problems with prior knowledge gained from previous client encounters and evaluation of new knowledge in relation to other aspects of care practice (Copley et al., 2010; Craik & Rappolt, 2003; Vachon et al., 2010b). Although deliberate action intended to enhance EBP is a hallmark of expertise, it is not characteristic of all occupational therapists, nor is it associated with years of experience (Ericsson, 2004). Indeed, this review showed that increased experience in clinical practice was associated with lower use of research in practice. On the one hand, experienced clinicians rely on their experience as a legitimate source of evidence, especially if it has confirmed the success of their interventions (Thomas, Sarayan, & Lajoie, 2012). Expert therapists, on the other hand, regardless of how long they have been working, are more intentional about whether and how they use research evidence (King et al., 2007).

Participation in research improves self-efficacy in doing research and promotes an evidence-based approach to practice (Craik & Rappolt, 2003; Fänge & Ivanoff, 2009). It appears that involvement in the different stages of research provides clinicians with knowledge and a set of skills that
lead to changes in how they view their clients and prompt perspective changes regarding treatment interventions.

Active participation in research and partnerships between clinicians and local universities are considered major enablers of RU and EBP. Clinician–researcher collaborations have been discussed extensively in the scholarship of practice literature (Kielhofner, 2005a, 2005b; Peterson, McMahon, Farkas, & Howland, 2005; Taylor, Fisher, & Kielhofner, 2005). Scholarship of practice is a collaborative model in which theory, research, and practice are interwoven (Kielhofner, 2005a). Many articles have described and advocated for the concept of collaboration between scholars and practitioners to promote knowledge dissemination and use. This body of work is aligned with the findings of this review in supporting the importance of the relationships between academics and practitioners in identifying practice needs, setting research priorities, and interpreting results from research in the context in which the new knowledge will be applied.

The results from this scoping study suggest that creating opportunities for clinicians to engage in research as part of their professional responsibilities may be a pivotal strategy for enhancing EBP. Collaborations between the university setting and the clinical community can be advantageous for both students and clinicians. Student projects and fieldwork experiences expose learners to the day-to-day applications of EBP. Clinicians benefit from students’ up-to-date knowledge and skills in aspects of EBP such as searching for and critically appraising the literature.

Organizational enablers of EBP include systems-level support, leaders who promote a climate of EBP, and adequate resources, although the literature provided only a glimpse into what organizational support should look like. The deployment of resources must be mandated at a systems level; these findings are consistent with the literature in nursing and medicine (Everitt & Sitterding, 2010; Stetler, Ritchie, Rycroft-Malone, Schultz, & Charns, 2009).

Studies of the effectiveness of KT strategies showed that interventions targeting specific barriers are successful in improving knowledge, increasing self-efficacy, and changing practice. A 2009 systematic review of the effectiveness of tailored KT interventions found changes in professional practice, although the evidence on the most effective methods to tailoring is insufficient (Baker et al., 2009). The presence of a research lead or “knowledge broker” in the clinical environment is a promising KT strategy; however, the specific responsibilities associated with this role have not yet been identified. Participation in action research projects appears to be another promising KT intervention. Opportunities to engage in authentic, clinically meaningful research projects within the practice context promote dialogue on the meaning of knowledge and evidence, particularly in relation to clinical decision making. These findings are consistent with social constructivist theories of learning, which maintain that the social environment is key in encouraging people to question what they know and develop new meanings and new perspectives (Driscoll, 1994; Gredler, 2009).

Although numerous conditions for the success of KT interventions were identified (e.g., using multiple strategies; providing resource packages and follow-up support, including opportunities for discussion, practice, and feedback; promoting a collaborative learning environment; grounding KT interventions in a social constructivist learning paradigm), this body of literature in occupational therapy is still in its early stages and is insufficiently substantive for more compelling suggestions to be made.

A major area of development for evidence-based occupational therapy relates to understanding the processes involved in the acquisition of EBP skills. Craik and Rappolt’s (2003) article “Theory of Research Utilization Enhancement” represents RU as a process that is influenced by active engagement in research, supervision of students, experiential learning, structured reflection, and consultations with peers. The theory suggests that a move toward greater use of research occurs when all five of these activities occur over an extended period of time. A deeper look at the nature of these activities suggests that time is a common element; mentoring students and engaging in research require time and take place over an extended period. In addition, the findings from this review suggest that RU capacity is contingent on intrinsic or individual enablers (e.g., reflection) as well as extrinsic organizational factors (e.g., supervising students, doing research).

Reflection seems to be an important intrinsic process-oriented facilitator of RU and EBP (Vachon et al., 2010b; Wimpenny et al., 2006). Although not a new concept in occupational therapy (Cohn, Schell, & Crepeau, 2010), the concept is taken beyond its more general application to clinical practice and explored relative to how it influences research use as a specialized area of practice (Lowe, 2007; Vachon et al., 2010a). Faced with a complex clinical situation, clinicians embark on a metacognitive process of reflection that challenges their current practices and promotes perspective changes about their interventions. The collaborative learning environment influences the extent to which clinicians use reflection to change their practice (Vachon et al., 2010b; Wimpenny et al., 2006). Vachon et al.’s (2010b) Model of Research Utilization Grounded in Reflection suggests that RU and reflective processes are complex and that changes are needed at multiple stages of the decision-making process.
Changes at the cognitive level include increasing knowledge and skills in various aspects of EBP; this finding is in line with KT research suggesting that these areas be targeted in interventions that are grounded in cognitive theories on learning (Wensing, Bosch, & Grol, 2010). Changes at the affective or emotional level (e.g., openness with and trust in colleagues, motivation) help clinicians reveal knowledge gaps. Changes in these dimensions could be informed by motivational theory, social cognitive theory, and the theory of planned behavior (Ajzen, 1991; Bandura, 1986; Rogers, 1995).

Finally, findings from this review suggest that clinical experience influences whether, how, and to what extent research evidence is integrated into practice. Uncovering tacit knowledge from clinical experience through structured reflection on past, current, and possible future clinical encounters assists clinicians in adopting EBP. A process that integrates the client-centered practice paradigm, structured reflection, case application, and peer consultations, ideally within a scholarship of practice model, can facilitate occupational therapists’ evaluation and integration of research evidence and promote best practice.

Limitations

Scoping reviews offer a unique opportunity to retrieve and scan a broad range of literature to answer a research question. Although this broad range represents a strength of the methodology, it can also be a limitation when the selected articles are heterogeneous and not readily amenable to synthesis. Another limitation is that we did not appraise the articles included in the review for scientific rigor because scoping reviews do not typically include critical appraisals of the evidence. In deciding to summarize and report the overall findings without the scrutiny of a formal appraisal process, we chose to speak to the extent of the research activity, major conclusions, and research gaps rather than provide the reader with support for the effectiveness of interventions or with evidence-informed recommendations. A final limitation is that by excluding review articles and studies of multidisciplinary groups of professionals, we may have overlooked data on subsets of occupational therapy participants.

Implications for Occupational Therapy Practice and Research

This scoping review uncovered five major supports for EBP that can be incorporated into current occupational therapy practice and investigated in future studies:

1. Clinical experience has an important role in clinicians’ awareness of self and of available sources of evidence and in their ability to incorporate evidence into practice. The exact nature of this experience remains both quantitatively and qualitatively unclear and needs further study.
2. Involvement in research through action research opportunities designed to meet authentic and situated clinical problems supports RU and EBP. Given clinicians’ busy schedules and limited time for nonclinical tasks, the exact nature of their research involvement needs to be clarified.
3. Partnerships among students, academics, researchers, and the clinical community within a scholarship of practice model promote the integration of research into clinical practice. Fieldwork experiences, research activities that take place in clinical settings, and clearly defined roles for universities in supporting EBP have the potential to achieve some important outcomes in promoting EBP.
4. The study of reflection and reflective learning as metacognitive processes involved in the integration of evidence into practice is a new area for occupational therapy researchers and may indicate potentially important enablers of EBP.
5. A strong trend toward developing and measuring the effects of KT interventions in improving knowledge attitudes and skills has been identified and should continue to be a major focus for EBP researchers in occupational therapy.

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