Occupational Therapists’ Perceptions of Evidence-Based Practice

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Occupational therapists are increasingly urged to carry out evidenced-based practice; however, little is known regarding their present practice and perceptions of evidence-based practice. To explore this phenomenon, a qualitative study was completed using a grounded theory approach. Semi-structured interviews were carried out with eight occupational therapists who worked in diverse practice settings. Participants were asked to reflect on their own views of evidence-based practice and their use of evidence in therapy. Data were analyzed inductively using constant comparison analysis. Participants’ perceptions of evidence-based practice were described in three broad categories. To these occupational therapists, evidence-based practice is: (a) a process of looking for understanding; (b) associated with research, and; (c) a potential threat to the occupational therapist. These findings produce a basis from which recommendations are made to increase the use of evidence-based practice by occupational therapists.


Occupational therapists are increasingly urged to ensure that they are delivering care that is based on the most credible scientific evidence; that is, that they are using evidence-based practice (Law & Baum, 1998). Modeled after evidence-based medicine, evidence-based practice incorporates elements of research utilization, professional judgment and knowledge of individual client characteristics, and preferences in the formation of clinical decisions (Sackett, Rosenberg, Muir Gray, Haynes, & Richardson, 1996).

In occupational therapy, evidence-based practice is viewed as both a personal and a professional responsibility (Llorens, 1990) and a necessity for professional survival at a time when health-care funding decisions are driven by cost containment (Gutman & Mortera, 1997). However, health-care workers have been slow to adopt clinical practice based on scientific findings. Reasons include difficulties accessing research literature; lack of time or knowledge required to search for, read, interpret, and evaluate relevant reports; and institutional barriers to changing current practice (Funk, Champagne, Torququist, & Wiese, 1995).

Additionally, although many writers have suggested that evidence-based practice in occupational therapy could be modeled directly after evidence-based medicine (Law & Baum, 1998; Lloyd-Smith, 1997; Taylor, 1997), clinical decisions in occupational therapy may differ from those of medicine, which are diagnosis, treatment, and prognosis. This difference may lead to difficulties in transferring methods developed in evidence-based medicine for use in occupational therapy (Egan, Dubouloz, von Zweck, &...
Vallerand, 1998). It may also lead to a very different view of what constitutes evidence-based practice.

The need to base occupational therapy intervention on the most current and rigorous evidence cannot be disputed; therefore, programs must be developed to help occupational therapists meet this challenge (Tickle-Degnen, 1998). To be successful, such programs must assist occupational therapists to use an approach to evidence-based decision making that is relevant to day-to-day practice, and to build on current perception and present use of evidence. The objective of this article is to examine the current perceptions and use of evidence-based practice among eight occupational therapists working in the Ottawa–Carleton region.

Method

In this research project, we were interested in exploring how practicing occupational therapists receive and use evidence-based practice. A grounded theory approach (Creswell, 1998; Strauss & Corbin, 1990) was used to systematically explore occupational therapists’ perceptions of evidence-based practice and to generate a substantive theory that describes the broad range of perceptions and experience of occupational therapists.

Sampling

In accordance with grounded theory, a theoretical sample was used. Selection of potential participants was based on their ability to contribute relevant information on the use of evidence in their own clinical practice. Occupational therapists were also chosen to reflect a diversity of practice settings and levels of experience. Potential informants were selected from members of the Canadian Association of Occupational Therapists who lived in the Ottawa–Carleton region and who had previously consented to be contacted for research participation. Potential participants were contacted by telephone to request their consent for inclusion in this project. New participants were added to the study until theoretical saturation was reached in each constructed category. The final number of participants was 8 (7 women and 1 man). Five participants worked in institutions (e.g., rehabilitation center, general hospital), 2 were community-based, and 1 was in private practice. Six out of 12 Canadian university programs were represented. Length of clinical experience ranged from 4 to 23 years with an average of 9.7 years.

Data Collection

Individual, semi-structured, in-depth interviews were conducted. Participants were invited to share their current perceptions of, thoughts on, and experiences with evidence-based practice through open-ended questions. These questions were oriented around the following three broad questions:

1. When you hear people talking about evidence-based practice, what does it mean to you?
2. Could you describe instances where you engaged in evidence-based practice?
3. On what basis do you make decisions about what you will do with clients?

Because we were interested in the occupational therapists’ personal interpretations of evidence-based practice, we did not provide any definition of evidence-based practice during the interview. The average interview length was 60 min. Interviews were scheduled at a time and place that was convenient for each participant and included the principal investigator’s office and therapists’ work sites or homes. Seven interviews were carried out in English and one interview was carried out in French. Interviews were tape recorded and transcribed verbatim. Because two of the researchers were French speaking, the responses were not translated into English before analysis to ensure retention of the original meaning. Ethical approval for this study was received from the Human Research Ethics Committee of the Health Sciences Faculty, University of Ottawa.

Data Analysis

Data was analyzed using the constant comparison analysis method of emergent categories (Creswell, 1998; Strauss & Corbin, 1997). This method of analysis is an inductive process that allowed us to construct a grounded theory of evidence-based practice. The analytic process involved three phases.

During phase one (open coding), we looked for units of information that described unique thoughts and experiences of each participant regarding evidence-based practice. We then regrouped these quotations into initial categories defined by specific properties and dimensions qualifying the thoughts and experiences expressed by the participants.

During the second phase (axial coding), we looked for central categories related to evidence-based practice that encompassed the initial categories. Three central categories were identified:

1. Evidence-based practice is a process of looking for understanding;
2. Evidence-based practice is associated with research;
3. Evidence-based practice is a potential threat to the therapist.

We then identified relations among these three categories using the coding paradigm presented by Strauss and Corbin (1990). This system aids in the establishment of relations between categories. These relations include causal conditions (events that led to the development of the participants’ perception of evidence-based practice), strategies (actions and interactions resulting from their perceptions of evidence-based practice), contexts (environments in
which actions take place), and consequences (results of the use of strategies).

In phase three (selective coding), we constructed a story line describing the perceptions and use of evidence-based practice by the participants. All four researchers worked in groups to discuss and question their own interpretations of the phenomenon under study until they reached a common interpretation. This critical reflection led to the construction of the grounded theory of evidence-based practice on the basis of the participants’ responses.

Analysis was carried out using the ATLAS/ti computer program (Muhr, 1997). The program helped us to ensure a systematic coding of the units of information (open coding) and to manage, compare, and reassemble categories.

Two of the authors were present during six interview sessions to ensure that the interviews proceeded according to the interview guide and to facilitate debriefing and transcription by the research assistant. These authors also analyzed two of the verbatim transcripts simultaneously and discussed the results in order to cross-check the process of categorization.

Each participant received a copy of the verbatim transcript of his or her interview to verify the accuracy of the transcript. Participants were asked to give their views on the credibility of the findings and interpretations contained in the final report (member checks). Very little was changed, but one participant was re-contacted by phone to address further concerns regarding the accuracy of answers to the interview questions. The final report was accepted by the participants as accurate.

Results

Results demonstrated that eight practicing occupational therapists perceived evidence-based practice in three emergent categories:

1. Evidence-based practice is looking for understanding.
2. Evidence-based practice is associated with research.
3. Evidence-based practice is a potential threat to the occupational therapist.

Each of these broad categories contained subcategories that will be illustrated with excerpts from the participants’ responses. Because two of the researchers were French speaking, the interviews that were performed in French were not translated into English before the analysis to ensure retention of the original meaning.

Category 1: Evidence-Based Practice Is a Process of Looking for Understanding

The participants strongly suggested that evidence-based practice is a process of looking for answers when a choice between possible interventions must be made. Four sources of knowledge, which will be described in this article, were integrated in the process of evidence-based practice:

1. Clinical experience
2. Professional and scientific literature
3. Occupational therapist peers and other health care workers
4. The client

Clinical experience. The first source of evidence for evidence-based practice was clinical experience. Participants placed emphasis on their own clinical experience. Clinical experience was defined by participants as their own stored experience and analysis of a history of interventions carried out with different clients, or with a given client. Knowledge gained during professional education programs was also defined as part of their clinical experience. These ideas are reflected in the following two excerpts of interviews with participants:

I think the more experience you have, the better you become at choosing theory.

When I think of evidence I think...there has to be some validity, there has to be some reliable data to back it up, because when you think of evidence in a court there has to be something that proves that. But...when I think of my practice, I think the evidence I use is what the client reports, and I take that as true. I take from what I have observed from my experience and from my schooling; that is also true, that's evidence in itself.

Participants expressed the belief that standardized evaluation of clients should be carried out to provide valid and norm-referenced data. However, participants indicated that the results of this type of evaluation did not always concur with their clinical observations. Tests alone were not sufficient sources of information on which to base holistic treatment decisions.

I don't think of component parts [of a client], so there are component parts that are evidence-based, but only a few component parts, such as the FIM [Functional Independence Measure], such as the cognitive tests, the Hierarchy Dementia Scale…but those have their limitations in themselves; they can't necessarily tell you about real function so then, in a sense, I have to challenge the evidence and say, despite that evidence, “This person has function.”

When the occupational therapist’s impression from observations differed from the results of more formal evaluation, the occupational therapist’s impression was the preferred source of evidence. In all eight interviews, it was apparent that the participants valued the evidence that emerged from their own observations of the client during functional activities. One participant stated that she also used “gut feeling” and instinct in combination with more formal sources of evidence to make decisions regarding a client.

What do I mean by instinct? Big gut feeling, I think, from what you see and then you have to make a decision, if the person is safe at home or not, can they go back to the community or do they need a residential care facility. When I think of instinct, then I usually have to follow up with something else, so if I'm unsure...I'll usually do another assessment. I'll extend it to do a home visit, and then I'll say “okay,” my instinct was that they would function well at home....Your clinical rea-
soning becomes more innate, so in a sense that turns into an instinc-
tual process.

The scientific literature. The second source of evidence is the scientific literature. The literature is perceived as a valuable source of information that can assist the therapist in confirming the appropriateness of an intervention.

Ça confirme ce que je fais, ma démarche. Ça m'aide à déterminer où mettre l'emphasis. [It (the scientific literature) confirms what I'm doing. It helps me determine where to place the focus].

I like to know the anatomy and the physiology and what's going on underneath because, to me, you can't really base a good treatment plan unless you understand what's going on fundamentally, so I'm always going back. I think it's a very, very important aspect of what we do.

To me, it's trying to use the literature and evidence that is actually in practice and building that into your practice and just building upon that so that there is literature and research supporting the practice that you put in place.

However, as client-centered clinicians, participants expressed internal conflict regarding the use of literature. Some participants were aware that the literature used is often not related directly to occupational therapy issues. Rather, the literature is related to the sciences of psychology or medicine within a biomedical model. Other participants saw their clients as responsible for their own rehabilitation objectives. In these cases, therapists believed that they needed to balance scientific facts with the client's expressed wishes regarding treatment.

How do I meld the two together [research and client's input] so that I'm sensitive to this larger body of research but I'm also sensitive to my role as an occupational therapist?

Such perceptions and beliefs provoke professional tension between being client-centered and being scientifically oriented in approach.

I think that we are fooling ourselves if we don't incorporate evidence-based practice. The practice of occupational therapy could be doomed. I think that's been a struggle with me: How do we incorporate evidence-based practice in our daily work to kind of validate the work that [we're] doing?

Participants tended to view the scientific literature as having a small but important role to play when considered with evidence from their clinical experience, and their observations of the particular client and their past clients.

Occupational therapy peers. The third source of evidence arises from occupational therapy peers and other health care workers. This source of evidence is seen as helpful, supportive, and readily attainable. Participants reported seeking knowledge from senior therapists or experts in specific areas through contacts with colleagues within or outside of their places of work.

I'll go to somebody and say, "Do you have information on that...?" and they'll pull out a file. So it's actually quite easy. There'll be literature in there, there'll be pieces of information from one vendor and another. They'll give me the file and I'll look through the file.

It appears that use of colleagues partly depends on the level of trust that has been developed with the contact person, as well as his or her perceived level of competence.

I'll go to the senior there and I'll talk to her and I'll say, "What do you normally try?" Or I'll talk to the nursing staff: "What have you seen used?"...So I'll communicate with the other staff at first to see, you know...Well, I mean we're very lucky at the...Center, we have excel-
lent knowledge there, everybody has a specialty, it seems like, in different areas, so it's very easy to network.

The client. Finally, the client is viewed as an important source of evidence because he or she is at the center of the intervention. Intervention emanates from what is observed by the occupational therapist, what is expressed by the client, and what is decided in consultation with the client.

I think that a person [occupational therapist] should...first of all, put the goals of somebody else [client] into her top consideration, and put that up at the top of the list and then work around from her clinical judgment.

It is apparent that the client is the main source of knowledge regarding what is the best therapeutic approach for him or her. Respecting the client's readiness for change is also important in the therapist–client relationship. This aspect of the empathetic therapeutic relationship provides a sense of cohesiveness between the occupational therapist and client and leads to a high level of job satisfaction.

I feel successful when I'm on the same wavelength as the client.

I know that I've been effective [when]...you also see a change in their [client's] attitude as well as they are becoming more positive, and they're getting more involved.

In case of conflict in the understanding of a situation between occupational therapist and client, the last call will be the client's to make.

Sometimes they make decisions, and I think "Oh! It's a dangerous one," and I let them know that; I'll say, "This is what I...you know, it's your choice, but this is what's gonna happen."

Summary. Evidence-based practice is perceived by occupational therapists to be a way of looking for understanding during the process of intervention. The four sources of knowledge used are reflection on one's own professional experiences, reference to the scientific literature, consultation with peers and other professionals, and attention to what the client has to say. The informants expressed a professional tension because knowledge from the literature was not always viewed as relevant, easily applied, or oriented to occupational therapy. Less tension was experienced regarding knowledge from peers and other coworkers, who were viewed as trusted and encouraging. The client was viewed as a key person, whose feedback was used to validate the process and goals of therapy.

Category 2: Evidence-Based Practice Is Associated With Research

The eight informants associated evidence-based practice with research. Research was defined as either active participation in a research project designed to generate new
knowledge or review of existing studies as a source of knowledge to apply in clinical practice. For all of the participants, research was described as a very important component of their practice. More specifically, research was seen by the participants as producing knowledge on which to base clinical decisions.

I think research is a very important aspect because, basically, when I choose a lot of my treatments, I go back to the literature… I had one lady with an injury of the extensor tendon, so I went back to the research and I read the article based on, okay, what type of splint should I use… because it’s something that may not happen a lot, so if there is research on it I can go back to that and I can base my clinical decision on that. So I think it’s very, very important.

Use of research findings was also seen by the participants as a way to feel more effective, as a starting point, and as a way of being more accountable.

We could set up our own research to do that and that’s why we’ve talked about it because we feel the evidence is important, and we realize that the health care dollars are decreasing; we realize that we gonna [sic] have to be a lot more accountable for what we do.

This perceived importance of research led the participants toward the intention of carrying out research. Some occupational therapists indicated a desire to set up research programs within their departments. Others demonstrated a keen interest in becoming involved in research designed to examine research questions and fulfill particular needs within their practice. However, the efforts to become involved in research were met with barriers; for example, occupational therapists sometimes expressed a very strong feeling of lack of expertise and knowledge required to carry out research.

Every now and then I do sit down and wonder if I could set something up to measure the effectiveness of my intervention, and it always comes back to the same problem: There are too many variables out there. And I guess my limitation is that I don’t know quite how and what to do with that to… set it up so that it would be a workable study.

This lack of expertise is also mentioned in regard to reviewing information from the scientific literature.

I think there is also an intimidation thing. Like to read research, you know, we’ve had a statistical course maybe and it’s a modest statistical course like, “Oh, I don’t have the right… or I don’t have the tools to read it [scientific literature] and understand it.”

Occupational therapists in the current study view research as important and also believe that they have a professional responsibility to provide the best possible interventions for their clients. For a number of respondents, lack of research expertise led to feelings of guilt. One participant discussed such feelings experienced early in her career. Looking back, she realized that she first needed to become comfortable in her clinical role and establish her professional identity before challenging herself by embarking on research.

I think in the past four and a half years… I’ve always felt not totally guilty, I’ve had spurts of feeling guilty about not doing research but I haven’t felt it was realistic because I had to develop myself as a therapist and know what I do as a therapist, feel comfortable with what I do as a therapist and then, I think now, it might be a little more realistic to challenge what I do as a therapist.

Participants discussed some solutions that would allow them to integrate research and clinical work. These included pursuing advanced degrees or hiring a professional experienced in research to provide guidance to clinicians. Often these solutions were grounded in past experience.

I remember really appreciating when I worked in some of the hospitals in (…) that there was… a research OT person in the hospital. You know, I just thought that was the greatest. You could go to that person, you had a computer database where [you could] get your resources and information. If you had an idea for research, you could talk to her about it. You always felt like things are moving and progressing and that there was a contact person.

One participant acknowledged the scarcity of occupational therapy research but thought that clinical judgment based on experience, theoretical knowledge, and careful reflection were just as important in making clinical decisions.

I’m an OT and I might not have a huge body of research but I am an OT, I have some basic guides about what OTs do, and also understand that I have some experience and I have to make sure that I use that as a guide. And just because my profession doesn’t have a whole huge body of research doesn’t mean that I can’t be thoughtful and make good clinical decisions that are professionally based.

Summary. Overall, evidence-based practice was perceived as a process associated with research. All levels of research activities appeared to be equally important to participants, including reading research reports and applying this knowledge clinically. All 8 participants were concerned with being efficient, accountable, and responsible for the development of their profession, but believed that their lack of research expertise put them at a disadvantage. They were interested in obtaining help from persons with greater knowledge about research, including occupational therapists with graduate training or other health professionals with research expertise.

Category 3: Evidence-Based Practice Is a Potential Threat to the Therapist

Evidence-based practice was perceived as having the potential to lead to recommendations for change in clinical practice, which might be threatening to the occupational therapist or other team members. Four participants reported the challenging consequence of evidence-based practice in their own work. One participant believed that examination of additional information at a time when she was attempting to sort out her role as an occupational therapist would have led to confusion.

I think, when you first start [as an occupational therapist], you’re still applying all the things you learned and you’re still learning so much about diseases… About, you know, function and how a disease process might affect function and… I think that it might have been too, too much because then I would be looking at too many variables; I’d be, I’d be totally confused going into work; Should I use that, should I use that? I wouldn’t feel as integrated…

Two other participants discussed the feelings of potential threat that they observed in other team members when the habitual ways of viewing the occupational therapy role
were challenged.

...to begin to reevaluate practice is a terrible threat to the team because they've come to depend on you to function in certain ways because their functioning depends on how you function.

Implementation of new ways of intervening led to conflict and resistance in one occupational therapy department.

Well, I think that some of the difficulties we imposed on ourselves because you've worked a certain way for a certain number of years and, for instance, changing our initial assessment caused a big uproar because it meant leaving a real recipe-oriented way of doing OT and it meant sitting down and really thinking what, what am I going to do with this client, and there are times when it would be challenging.

However, such an evolution of practice was also perceived as positive and helpful.

[W]e don't look at change as a bad thing, we look at it more as an opportunity—“Let's see what we can do differently and what can we strengthen to improve the service”—and fortunately the staff that we do have are quite flexible and adaptable to that and aren't too resistant to change. Everyone doesn't always like change, but at least people can look at the positive that can come from change, so that's a good thing.

Another participant identified the importance of using reflection in clinical practice:

I think that the basis of that [evidence-based practice] is self-analysis, looking at your practice and seeing how can it be modified. I think that a real rigid thinker would have difficulty in OT because you just can't work rigidly. You don't ever get two clients that are the same, and you don't get clients that fit into an approach quite neatly. So that's, that's my biggest thing is to always be thinking about what I should be doing, what I could be doing, what I've done.

Summary: Evidence-based practice is perceived as a threat to the routine ways of analyzing and carrying out therapeutic interventions. In a sense, it disturbs a level of comfort acquired during years of practice and it has the potential to disrupt existing interdisciplinary relationships. It was evident that the ultimate consequence of acquiring new knowledge could either have a negative impact, when it was perceived as a threat, or a positive result, allowing greater creativity in the therapeutic process to make intervention potentially more effective.

Grounded Theory

Further analysis of the responses was carried out to identify the relationship between categories and develop the storyline (see Figure 1). This allowed us to construct a substantive grounded theory based on the perceptions of evidence-based practice of the 8 participants. According to the participants, knowledge required to practice occupational therapy in a competent manner was readily available to them. This knowledge came from the clients themselves, the therapists' formal and continuing education, their own clinical experience with clients, consultation with expert occupational therapists and other health care colleagues, and information from the medical literature. The participants believed that knowledge from these sources was invaluable to their understanding of their clients' needs and to their choice of possible interventions. Integration of evidence from all of these sources of knowledge appeared to provide the participants with a solid feeling of competency and a high level of job satisfaction.

Whereas the therapists believed that they were competent using these sources of knowledge, they also perceived that they should be demonstrating their effectiveness to those outside of the profession. They believed that this could best be done through the citation of supporting research, where available, and the production of new outcomes research. Because participants did not perceive that their employers absolutely required that they demonstrate the effectiveness of their interventions, use of research was seen as a secondary concern. The occupational therapists' primary concern was with the satisfaction of individual clients, and use of research was not seen as crucial to achieving such satisfaction. Associated with this primary concern was a strong belief and an attachment to the client-centered approach. This approach provided clear guidelines for valuing partnership and collaboration with the client and was considered a necessary component of competent practice.

Additionally, participants reported many barriers to the consumption and production of research including lack of time, lack of support, and perceptions that existing research knowledge was difficult to apply to individual clients. Participants believed that these barriers had been reinforced many times during past attempts to carry out research in the work environment. During these past experiences, participants came face-to-face with limitations in their knowledge and abilities; these encounters generated feelings of inadequacy. These feelings worked against any motivation to overcome barriers and reinforced the participants' professional choice to look for client-based evidence.

Finally, there was a perception that research findings might challenge the participants' present practice, which they perceived to be effective. Participants believed that changes in practice suggested by research evidence might potentially disturb the therapists' sense of competency, their sense of a client-centered approach to practice, and the hard-won smooth working of their multidisciplinary teams. Colleagues had come to expect that participants would carry out specific tasks and practice in a certain manner. Although participants valued flexibility, adaptability, and openness to change as positive professional attributes, change was, nevertheless, perceived as a potential challenge to their professional identity. This conflict between values and the reality of their work may have resulted in a certain level of individual or systemic resistance to engagement in research activities that might lead to change.

Discussion

Evidence-based practice appears to be an issue that occupational therapists reflect on during their clinical practice.
In contrast to descriptions of evidence-based practice found in the literature (Law & Baum, 1998; Sackett et al., 1996), participants placed more emphasis on knowledge from clinical experience, clients, and consultation with colleagues than they did on research literature. More particularly, analysis of past clinical experience is based on the perceived efficacy of previous actions and the similarity of past clients to the person under consideration. Previous experience is viewed as providing the occupational therapist with a vast source of potential solutions. This mirrors Schön’s (1983) concept of thinking in action, in which professionals have strong skills in finding implicit knowledge in their own clinical experience and use this insight to deal with new situations. Mattingly and Fleming (1994) described this process of clinical reasoning and suggested that expertise is enhanced by the use of a myriad of personally constructed practical theories. This process is described within the present series of interviews and appears to be activated by the nature of the client-centered approach, in which clients are seen as unique and possessing of knowledge valuable for use in clinical decision making.

Whereas knowledge based on client input and previous experience is considered in descriptions of evidence-based practice found in the literature, it is recommended that these sources be used to temper decisions based on research findings (Law & Baum, 1998; Sackett et al., 1996). Participants, however, based their practice decisions on clients’ input and previous experiences because these sources were seen as crucial to competent practice, whereas knowledge from research was seen as primarily important in confirming the effectiveness of practice to nonclients. Because use of research was associated with expectations of those other than clients, it was logical that therapists practicing in a client-centered approach did not consider it as a priority in their daily practice.

Participants’ perceptions of evidence-based practice differed from traditional descriptions in the literature in another important way. Traditional descriptions of evidence-based practice stress crucial evaluation of sources of information based on epidemiological validity criteria. Some participants believed that they lacked skills in assessing the validity of the information, which was perceived as a barrier to accessing research-based information. Because
of this belief, participants were more likely to consult and accept information from trusted personal sources.

Other studies indicate that differences between clinicians’ perceptions of knowledge required for competency and those espoused by proponents of evidence-based practice are not unique to occupational therapy. When physicians were asked to describe their motivations for prescribing drugs with no known benefits or poorer cost-benefit ratios than alternatives, they cited knowledge from their own clinical experience as a primary factor in the decision-making process; some participants were openly hostile to any suggestion that results of scientific research might provide them better evidence of treatment effectiveness than impressions from their own clinical experience (Schwartz, Soumerai, & Avorn, 1989). A survey of American psychologists indicated that merely 10% of American psychologists have access to scientific literature (Morrow-Bradley & Elliott, 1986). Although student clinicians are taught that research drives the profession, in actual practice the steps that are followed are based as much on evolving traditions as they are on current critically appraised research findings (St-Arnaud, 1992). As well, a recent challenge from the president of the Canadian Physiotherapy Association that physiotherapists critically evaluate the strength of evidence supporting specific continuing education programs (before attending such programs and adopting the techniques) (Belanger, 1997) was met with a deluge of angry letters (Dwight, 1998; Green, 1998; Markovitch, 1998; Vaughan, Flitt, & Jones, 1998) suggesting that experience and expert opinion were more important to competency than knowledge of research findings.

If efforts designed to increase the use of research are to succeed, educators must consider and build on what occupational therapists value as their knowledge base. Results of the present study indicate that, with regard to clinicians, knowledge from professional training, client input, information from colleagues, continuing education workshops, and clinical experience must be considered as valid sources of evidence for practice. With respect to entry-level professional education, the findings suggest two questions. First, how can educational programs best prepare future occupational therapists to view the use of research evidence as crucial to competent practice? Second, how can future occupational therapists be educated to view the use of research findings as a necessary part of the client-centered approach?

**Limitations of the Study and Further Research**

The results of this study are limited by the fact that only eight occupational therapists from one region were interviewed at one point in time. Whereas the participants included persons who had trained at six of the twelve Canadian programs, their experience may not be transferable to occupational therapists who trained in other programs in Canada or other countries. As well, participants received their training at least 4 years ago; more recent graduates may have different perceptions of evidence-based practice. Further research is required to determine whether these findings reflect the views of therapists in other regions with varying levels of experience.

Research designed to find creative solutions to the barriers and challenges to evidence-based practice identified in this study would also be of interest. This topic could involve a participatory approach such as action research. Research questions might address strategies to overcome lack of time, inability to interpret research findings, and feelings of potential threats to practice. This research would not only investigate possible change strategies in a specific clinical situation, but would also offer understandings for solutions transferable to different settings.

**Conclusion**

The occupational therapy participants in the present study were concerned with the evidence base for their practice. Knowledge used to make decisions came primarily from reflection on clinical experience, client input, early and on-the-job training, basic medical information, and continuing education. Knowledge from these sources was viewed as crucial to competent, client-centered occupational therapy. Use of research findings was viewed as important in demonstrating effectiveness of occupational therapy to payers of these services. However, barriers to the use of research findings were identified, including the potential of such findings to challenge current practice that was perceived as effective.

If occupational therapists are to use research findings in their practice, this conflict of values must be addressed. It is recommended that methods be introduced to attempt to assist students and practicing occupational therapists to more critically evaluate sources of evidence that they presently value. Any efforts to increase the use of research evidence among occupational therapists must acknowledge the place of other types of knowledge in occupational therapy practice. As well, it is recommended that approaches to help therapists view the use of research findings as an integral part of competent, client-centered occupational therapy be introduced and evaluated.

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