WHAT FACTORS ENABLE THERAPISTS TO ENGAGE IN THE OCCUPATION OF EVIDENCE-INFORMED OCCUPATIONAL THERAPY PRACTICE?

by

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DEDICATION

This thesis is dedicated to all the clients who continue to inspire and motivate us to support them in achieving their meaningful occupations and to the occupational therapists who continue to strive to make sure that clients receive the best possible services.

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ABSTRACT

Engaging in evidence informed practice is an important competency for occupational therapy practice in Canada. The purpose of this qualitative study was to understand how occupational therapists are currently using evidence in practice. Ten occupational therapists working in a tertiary care hospital participated in semi-structured qualitative interviews that informed the findings of this study. The Canadian Model of Occupational Performance and Engagement was used as a framework to understand and discuss how these therapists used evidence to inform their practice. All participants actively engaged in the occupation of evidence informed occupational therapy practice. They interacted with evidence by adapting it and translating it to effect change in practice and support their clients. They also shared their experiences with colleagues in order to support engagement with evidence among members of their practice community. The practice environment influenced how participants implemented evidence and provided opportunities to develop ongoing encouragement and support.

LIST OF ABBREVIATONS USED

ACOTRO	Association of Canadian Occupational Therapy Regulatory Organizations
CAOT	Canadian Association of Occupational Therapists
CMOP	Canadian Model of Occupational Performance
CMOP-E	Canadian Model of Occupational Performance and Engagement
CPPF	Canadian Practice Process Framework
PEO	Person-Environment-Occupation Model
RCT	Randomized Control Trial

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CHAPTER 1: INTRODUCTION

Occupational therapy practice is multi-faceted. It requires the clinician to integrate practice knowledge, client factors, theory, and current research evidence to ensure that the services provided to clients are based on best available evidence. It is important that occupational therapists have the knowledge and skills to successfully integrate evidence into clinical work within a practice environment that continues to evolve and change.

Using evidence to support clinical practice is widely accepted within the Canadian occupational therapy community and is identified as an important competency for occupational therapy practice (Law, Missiuna & Pollock, 2008). The Joint Position Statement on Evidence-based Occupational Therapy (CAOT, 1999) indicates that occupational therapists have a responsibility to use evidence from sources including research, experts, and professional experience. Integrating various sources of information including new knowledge is also embedded within occupational therapy's essential competencies where it is regarded as an important aspect of professional practice (ACOTRO, 2011). It remains challenging to implement evidence into the clinical environment despite documents supporting its importance to guide practice (Hinojosa, 2013; Lencucha, Kothari & Rouse, 2007; Rycroft-Malone et al., 2004). Barriers such as lack of clinically relevant research and lack of organizational support have been cited as contributing to the challenge of implementing evidence into occupational therapy practice (Cramm, White & Krupa, 2013; Thomas & Law, 2013). There remains a tension between the need to implement evidence into practice and the challenge of doing so within the clinical environment.

Using evidence in practice is not a passive process, but one that requires the therapist to actively seek out knowledge, integrate it into their practice, and evaluate its effectiveness (Law, Pollock and Stewart, 2004; Scott et al., 2012; Townsend & Polatajko, 2007). Integrating evidence into practice requires change both at the level of the individual practitioner and throughout the organization (Thomas & Law, 2013; Damschroder, et al., 2009). This process requires the clinician to interact with the evidence to support their practice.

The objective of this study was to understand how occupational therapists are using evidence in practice and to determine if engaging in evidence informed occupational therapy practice was an occupation. Occupations are groups of activities and tasks of daily life that have meaning and value to an individual and a culture (Law, Polatajko, Baptiste & Townsend, 1997). Occupational engagement is concerned with not only the performance of the occupation, but its importance and meaning for the individual within their culture (Townsend & Polatajko, 2007). While occupational therapists primarily concern themselves with the occupations of their clients, they have tasks and activities that underpin their clinical practice influencing how they engage in their work and provide the most appropriate services to their clients.

This qualitative study used semi-structured interviews to explore the perceptions and experiences of using evidence to support practice for ten occupational therapists working at a tertiary care hospital in Winnipeg. They discussed their experiences with using evidence in order to support and effect change in their practice. The findings of this study informed a discussion of the aspects of the person and their environment that contributes to supporting the assertion that engaging in evidence informed occupational

therapy practice was an occupation for these therapists. This also provided an opportunity to explore the ways that occupational therapists engage with evidence to support and influence change in their practice.

CHAPTER 2: LITERATURE REVIEW

It is important to have an understanding of what constitutes evidence in order to provide a context for understanding how therapists use evidence in practice. It is also important to understand facilitators and barriers to using evidence identified in the literature. These will inform an understanding of what enables therapists to use evidence in practice. This thesis will employ the Canadian Model of Occupational Performance and Engagement (CMOP-E) framework to explore the factors that enable the use of evidence in practice. This occupational therapy model will also provide a structure for discussing the literature and will be used throughout this thesis.

2.1 Search Strategy

An initial literature search was conducted to inform the literature review for this thesis. The literature search was completed using CINAHL and PubMed, then an additional search was completed using Google Scholar. The primary search terms used were: evidence, practice, knowledge translation, occupation, engagement, and enablement. Relevant works cited in the articles obtained were reviewed to develop a greater knowledge base and further explore key concepts. An additional literature search was conducted after completion of the study using the original search terms as well as the terms implementation, organization, and occupation which were added to reflect the themes that emerged from interviews. This additional literature search was used to further inform the discussion and conclusions.

2.2 Defining Evidence

Occupational therapists are regularly encouraged to use evidence to support their practice but outside of the academic environment clinicians often express uncertainty of how to proceed (Leclair et al., 2013). Adding to this uncertainty are the multiple terms used to describe the process of using evidence to guide practice. To best understand this process it is important to begin with a review of the key terms that guide this aspect of occupational therapy practice.

Although terms such as evidence based practice, evidence informed practice, and knowledge translation are frequently used in both the literature and the clinical environment, these concepts are often poorly understood. Evidence based practice is utilized by many health professions and developed from evidence based medicine which suggested that clinical decision making is guided by relevant evidence obtained from research (Rosenberg & Donald, 1995). The term evidence informed practice builds on this idea of including multiple types of evidence in addition to research to guide decision making (Law & MacDermid, 2008). Evidence informed practice incorporates evidence from research, clinical practice and experience, client beliefs and preferences, and healthcare environment (Public Health Agency of Canada, 2014; Sawatzky-Dickson, 2010).This process begins with asking a relevant clinical question, obtaining and appraising the available evidence, applying the evidence to the clinical situation, and evaluating its effectiveness (Egan, Dubouloz, von Zweck & Vallerand, 1998; Law & Baum, 1998; Sackett, Rosenberg, Gray, Haynes & Richardson, 1996). This concept developed initially in the field of medicine and has been widely accepted by nursing and allied health professions including occupational therapy (Law & Baum, 1998; Rycroft-Malone et al., 2004; Sackett et al., 1996; Scott et al., 2012). Occupational therapists

incorporate evidence obtained from research, clinical expertise, understanding of the client and the local environment (Reagan, Bellin & Boniface, 2010). The term evidence informed practice reflects how occupational therapists use multiple sources of evidence to support their practice and will be used throughout this thesis.

Having access to multiple sources of evidence alone is not enough to change practice. Evidence must be obtained, evaluated, and integrated into practice. Knowledge translation is the process of implementing evidence into practice (Cramm et al., 2013; Kitson & Harvey, 2016). The Canadian Institutes of Health Research (2014) states that knowledge translation is "a dynamic and iterative process that includes synthesis, dissemination, exchange, and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system" (para. 4). Terms including knowledge transfer, knowledge exchange, and research utilization are also used to describe this process; however the term knowledge translation is predominant in Canadian literature (Graham et al., 2006; Thomas & Law, 2013). Knowledge translation is focused on changing practice behaviour in order to close the gap between research and practice (Scott et al., 2012). This term is reflective of the experience of Canadian occupational therapists and will be used in this thesis. With an understanding of what constitutes evidence and how it is used, it is equally important to understand why evidence is important in occupational therapy practice.

2.3 The Need for Evidence in Practice

In Canada, evidence informed practice is an important competency for occupational therapy practice. The Joint Position Statement on Evidence-based Occupational Therapy (CAOT, 1999 reviewed for currency 2009) states that "The occupational therapist must use all reasonable means to continually expand his or her professional knowledge base through review and critical evaluation of related research, professional literature and continuing education." (p.3). Using evidence is a key component of occupational therapy and is important in informing all aspects of how an occupational therapist engages in their practice. This position statement was initially developed in 1999, and was reviewed for currency in 2009. This suggests that using evidence to inform practice remains important and relevant for occupational therapy.

Using evidence to support occupational therapy practice is more than just a belief for therapists; it is embedded into the professional expectations for Canadian occupational therapists. The Essential Competencies of Practice for Occupational Therapists in Canada, 3rd edition (ACOTRO, 2011) states that occupational therapists need to "demonstrate effective and evidence-based problem solving and judgment to address client needs" (p.24). The Canadian Association of Occupational Therapists (CAOT) in their 2012 Profile of Practice of Occupational Therapists in Canada also clearly states that there is an expectation for competent occupational therapists to "critically appraise best evidence in order to address client, service, or practice questions and integrate critical appraisal conclusions into daily practice" (p.10) (CAOT, 2012). The articulated need to use evidence in practice in ACOTRO and in the CAOT Profile of Practice demonstrates that all occupational therapists in Canada must ensure that their clinical decision making is informed by evidence. It is important to understand what

constitutes evidence for occupational therapists in order to begin to understand how they use evidence in their practice.

Using evidence in practice is not just important for occupational therapists, it is important for all health professions. Using evidence to support practice is discussed in the literature of other disciplines including medicine, nursing, and other allied health professions. Other health professions have identified similar facilitators and challenges to using evidence in practice which are relevant to this discussion (Damschroder et al., 2009; Graham et al., 2006; Rycroft-Malone, et al., 2004; Scott et al., 2012). As this is an area of study that is relevant across healthcare, research from other health professions is included in this discussion in addition to the work completed by occupational therapists. This strategy will help to develop a broader understanding of the many factors that contribute to the use of evidence in practice.

2.4 Evidence in Occupational Therapy Practice

Occupational therapists utilize many sources of evidence in their practice. These include their understanding of the client, theoretical knowledge, quality research evidence, and therapist clinical reasoning (Townsend & Polatajko, 2007). Law et al. (2004) describe evidence informed practice as "a combination of information from what we know from research, what we have learned from clinical wisdom, and what we learned from information from the client and their family. This combination of information enables us to work together with clients and families to make the best use of knowledge" (p.15). Occupational therapy practice requires clinicians to integrate multiple sources of knowledge and expertise to guide their clinical decision making. It is

important to consider what is involved in using evidence in occupational therapy practice. Therapists engage in activities that facilitate utilizing evidence. These include the activities involved with acquiring and implementing evidence.

2.4.1 Acquiring evidence

Ongoing learning and development beyond initial academic training is important for occupational therapists. This ongoing learning is necessary to inform clinical practice and an important source of evidence in occupational therapy. This includes participation in formal and informal educational activities. Formal activities may take place within or outside of the clinical environment and be completed individually or as part of a group. Formal professional development activities can include reading journals, attending courses and conferences, webinars and on-line learning modules, presentations from experts, and attending education sessions such as lectures (Burke & Gitlin, 2012; Law et al., 2004; Rycroft-Malone et al., 2004; Thomas & Law, 2013). Informal professional development activities include participation in discussion groups, sharing clinical experiences with colleagues, and mentorship from expert clinicians (Dunn & Ball, 2008; Lencucha et al., 2007; Menon, Korner-Bitensky, Kastner, McKibbon & Strauss, 2009; Thomas & Law, 2013). Therapists may employ a variety of strategies to obtain and understand research evidence including participating in journal clubs, use of systematic reviews to answer a clinical question, and completion of critical appraisals (Law et al., 2004; Rycroft-Malone et al., 2004). While formal professional development is important for occupational therapy practice, therapists frequently engage in informal learning, particularly within their clinical context. These activities are more accessible and are often perceived as more clinically relevant for therapists' day to day practice.

Some of the informal professional development that occupational therapists engage in includes knowledge shared by colleagues, clinical insights learned in practice and through sharing of patient stories (Burke & Gitlin, 2012). These are accessible forms of evidence that are used to inform day to day practice.

Occupational therapists may also engage in the development of research either as a researcher or in partnership with members of the academic community including researchers and students (Burke & Gitlin, 2012; Kielhofner, 2005; Leclair et al., 2013). Generating new knowledge is an important aspect of evidence informed occupational therapy practice. However, change in practice requires new learning to be implemented into the clinical context.

2.4.2 Implementation

Therapists must choose to actively engage in the process of obtaining, understanding, evaluating, and incorporating evidence from a variety of sources into their practice. Incorporating evidence presents challenges for health professionals (Rycroft-Malone et al., 2004). Occupational therapists work within dynamic practice environments and frequently work as part of interprofessional teams. The collaborative nature of interprofessional teams can either support or hinder the use of new evidence in the clinical context. A collaborative team can work together to implement an interprofessional focused intervention which leads to beneficial client outcomes. However, if the intervention is complicated to implement or if it requires buy-in from other team members who may not be involved with or support the intervention, it may be challenging to use within an interprofessional team environment (Cramm et al., 2013;

Rycroft-Malone et al., 2004). The way in which interventions are implemented into the practice environment is therefore very dependent upon the context of that environment.

Engaging in evidence informed occupational therapy is important for all therapists regardless of the nature of their practice. Therapists work in a variety of capacities and in the course of their work may be involved with various aspects of the generation, development, implementation, and evaluation of evidence. Using evidence to inform occupational therapy practice is important for all therapists, not only those working in clinical practice. Therefore it is important to consider occupational therapists working in a variety of capacities including managers, educators, consultants, policy analysts, and researchers (Townsend & Polatajko, 2007). The use of evidence is therefore meaningful for all occupational therapists regardless of their practice setting. In order to understand the complexity of using evidence it is important to have an understanding of what occupational therapists consider to be evidence.

2.5 Types of evidence

Occupational therapists rely on multiple sources of evidence to guide practice. This includes evidence from research, clinical expertise, the experiences of clients and their families, and the local context or environment where the decisions are made (Reagan et al., 2010; Rycroft-Malone et al., 2004; Sackett et al., 1996). It is important to understand each of these types of evidence and their value for occupational therapy practice.

2.5.1 Research evidence

This is the form of evidence that therapists often cite as being highly valued but the most challenging to implement. While there is a growing body of occupational therapy research, relevant and clinically applicable evidence remains challenging to find in many areas of practice (Cramm et al., 2013; Law et al., 2004). This has an impact on how effective occupational therapists can be in using clinically relevant research to guide their practice. The type of evidence that is available to occupational therapists can also present challenges. The value of research evidence is often presented in a hierarchical manner with systematic reviews and large scale randomized control trial (RCT) study designs identified as the "gold standard" for evidence based medicine (Hinojosa, 2013; Law & MacDermid, 2008). However this is problematic for occupational therapy researchers. Occupational therapy practice is highly individualized and it is difficult to randomize the types of interventions provided (Hinojosa, 2013). It may also be difficult for RCT findings to be implemented into the clinical setting, because individual variation and challenges may limit the applicability of these very empirical studies (Hinojosa, 2013). It is important to consider that other forms of evidence, while less scientifically rigorous, may be equally beneficial to the client and easier to implement into the clinical setting (Law et al., 2004). This can include research using other study designs such as cohort studies, case-control studies, cross-sectional studies, surveys and case reports (Law & MacDermid, 2008). Qualitative research is also frequently used by occupational therapists as a source of research evidence but may also be perceived as lacking in applicability to a particular clinical situation (Cramm et al., 2013). While evidence from research is important for occupational therapy practice, it is not the sole form of evidence that therapist utilize to support their practice. Occupational therapists also rely on other

sources of evidence in order to inform their practice. It is equally important to consider these other sources of evidence.

2.5.2 Clinical expertise

Clinical knowledge, experience gained through practice, and clinical reasoning are often cited by occupational therapists as valued resources to support practice decisions (Cramm et al., 2013; Cameron et al., 2005; Law & Baum, 1998; Reagon et al., 2010). Clinical knowledge is highly valued among health professions as a key form of evidence to guide clinical decision making. Sackett et al. (1996) suggested that research and other external forms of evidence "can inform but can never replace individual clinical expertise" (p.72). Clinical experience is based on the cumulative experience and knowledge learned in practice and is useful both in guiding decision making and evaluating other forms of evidence (Rycroft-Malone et al., 2004). In this way, clinical expertise is a necessary and highly valued form of evidence that influences how other forms of evidence are utilized.

2.5.3 Client and family expertise

Occupational therapists consider the client and their families an important source of knowledge and expertise. Understanding characteristics of a client population and the specific values, needs and goals of an individual client are important types of knowledge and expertise to guide practice (Reagon et al., 2010; Rycroft-Malone et al., 2004). Occupational therapists practice from a client-centred perspective where the client is an equal partner in the decision making about their care (Townsend & Polatajko, 2007). While research and clinical knowledge are important types of evidence, they must meet

the needs and goals of the individual client or a client population, and therefore the expertise of the client is a valuable form of evidence.

2.5.4 Local environment or context

The local context can provide valuable evidence which informs practice decisions. Organizations regularly complete audits of program performance and develop tools such as clinical pathways and clinical practice guidelines (Law & MacDermid, 2008; Rycroft-Malone et al., 2004). Other data that is relevant to the practice context such as organizational culture, and social and professional networks also form valuable evidence that can impact and influence practice (Kitson et al., 2008; Rycroft-Malone et al., 2004). These resources are created within the practice environment where they are used and consider many factors that influence the context of that environment. These resources add valuable information regarding the local environment and may address challenges or resources that are unique to that environment.

2.5.5 Evidence considerations

Each of these types of evidence is valuable and is important to consider. They all have an impact on how evidence is implemented into practice individually and in relation to each other. It is important to consider for each of these forms of evidence how they are perceived and valued, and how they influence the way that evidence is adopted into practice.

2.6 Challenges and Facilitators to Using Evidence

Many factors contribute to effective integration of evidence into practice. To effectively implement evidence into the clinical environment it must be simple to use and easily adopted. It should be compatible with the values of the organization, easily adapted to the local setting, improve services provided to the client, and provide a relative advantage that encourages its ongoing use (Damschroder et al., 2009; Greenhalgh, Robert, Macfarland, Bate & Kyriakidou, 2004). Evidence that can be effectively implemented and maintained must fit the needs of the client, the therapist and work within the practice environment.

While occupational therapists may support the principle of evidence informed practice, its integration into clinical work is commonly difficult. Using evidence in practice is complex and does not progress in a linear fashion (Burke & Gitlin, 2012; Kitson et al., 2008; Rycroft-Malone et al., 2004).There are several challenges to incorporating evidence into clinical environments. These include adopting evidence, evaluating the quality of that evidence, and implementing evidence in practice.

2.6.1 Adopting evidence

Adopting new evidence into practice can also present challenges. Therapists report positive attitudes towards the use of new evidence to support their practice, but express that a gap exists between the research which is generated and their ability to adopt it into their clinical work (Leclair et al., 2013; Lencucha et al., 2007). Therapists improve their access to knowledge through education and training on how to acquire, evaluate, implement, and sustain new forms of evidence into their practice (Bennett & Bennett, 2001; Cameron et al., 2005; McCluskey & Lovarini, 2005; Scott et al., 2012). In

addition, they must also be able to actively implement new knowledge into their practice. This may be negatively impacted by a lack of time and institutional support in the practice environment to support these initiatives (Cameron et al., 2005; Humphris, Littlejohns, Victor, O'Halloran & Peacock, 2000; McCluskey & Lovarini, 2005). Therapists require the time and appropriate tools to incorporate new evidence into practice. For example, for a therapist to implement a new cognitive assessment into practice they will require the time to obtain the evidence supporting the use of the assessment, the skills to appraise the quality of that evidence, access to the assessment tool itself, and the opportunity to become familiar with the assessment. They may also benefit from opportunities to engage with other therapists who have utilized the assessment to understand the clinical implications of using this new assessment. Without access to these resources, occupational therapists struggle to engage in evidence informed practice.

Evidence that is successfully adopted into practice usually has several qualities. It will provide a relative advantage to use over other forms of evidence. It will be compatible with the needs and values of the therapist and the client and answer the particular clinical question which has been identified. It will be easily understood and easy to use. It will be easy to implement in the practice setting in terms of time to learn, time to implement, and number of steps to complete as part of its use (Damschroder et al., 2009; Metzler & Metz, 2010). It is also important that the evidence is relevant to the client and the therapist within the practice context and that it can be successfully implemented (Greenhalgh et al., 2004; Metzler & Metz, 2010). If the evidence is difficult to implement or clinically irrelevant it is less likely to be integrated into practice. The

outcome of using the evidence needs to be easily observed, and the costs perceived by the organization as adding value (Damschroder et al., 2009; Susawad, 2005). In this way, successful adoption of evidence requires a fit between the evidence and the environment where it will be used.

2.6.2 Evaluating evidence

When evidence is available, therapists must have the knowledge of how to evaluate that evidence. Many factors can impact the effectiveness of evaluating evidence. Therapists may feel they have limited skills to evaluate evidence and lack of confidence in using those skills. This may limit the therapist's ability to understand the evidence and appraise its quality (Thomas & Law, 2012). Even when therapists are provided with the appropriate education to evaluate evidence, the ability to sustain the use of evidence over time requires ongoing practice and institutional supports to ensure that the skills are maintained (McCluskey & Lovarini, 2005; Scott et al., 2012). This lack of opportunity to maintain previously acquired skills can negatively impact a therapist's ability to effectively integrate new evidence into practice and support its ongoing use.

2.6.3 Organizational challenges

Using research to guide practice is often difficult within the constraints of many practice settings (Hinojosa, 2013; Humphris et al., 2000; Law et al., 2004; Lencucha et al., 2007). The work environment may not support taking the time to focus on research related activities or there may be limited institutional support or resources for therapists to develop their skills to understand and implement research (Susawad, 2005). These challenges make evidence informed practice more difficult in many practice settings.

2.6.4 Facilitators to using evidence in practice

The value of implementing evidence is well supported despite challenges to using evidence in occupational therapy practice (Kielhofner, 2005; Law et al., 2004; Leclair et al., 2013; Lencucha, 2007). Therapists who are consumers of evidence that is clinically relevant and can be incorporated into practice are more likely to continue to use that evidence (Law et al., 2004). Therapists with postgraduate training may also have greater confidence in using evidence to inform practice and have more positive attitudes towards using evidence (Thomas & Law, 2013). It is also important that therapists have adequate time to interact with evidence in practice. They require time and resources to interact with new evidence in order to integrate the evidence in their practice (Humphris et al., 2000; Metzler & Metz, 2010). This is important in all practice contexts.

These facilitators suggest that using evidence in practice can be achieved but requires appropriate resources and supports for successful implementation and continued use in practice. For this reason it is important for therapists to have access to the tools and resources they need to use evidence in their practice environment.

Understanding the challenges and facilitators of using evidence in occupational therapy practice is necessary to understand the context in which occupational therapists practice. There are many challenges and competing demands for therapists' time, yet occupational therapists are using evidence to inform their practice. It is important to understand how therapists are using evidence in their practice and what factors influence how successful they are in doing so.

2.7 Engaging in Evidence Informed Occupational Therapy

Adopting evidence into clinical practice is more than simply obtaining new knowledge through passive strategies such as attending workshops or reading journal articles. It is an interactive process which requires the clinician to reflect upon the new information and integrate its use into practice in a way that is meaningful for their clients (Metzler & Metz, 2010; Thomas & Law, 2013). Occupational therapists may use evidence to answer a specific clinical question for an individual client or they may use evidence to guide their practice with a group of clients. Evidence informed practice is more than a construct to guide clinicians; it is an interactive process for occupational therapists.

Occupational therapists rely on many of the same skills to engage in clinical practice that they use to engage in evidence informed practice. This makes it difficult to observe the process of using evidence to inform practice. However, differences may be more readily seen in the outcomes and interventions provided to clients as well as in the way that therapists articulate the decision making that informed their client interventions (Damschroder et al., 2009; Thomas & Law, 2013; Scott et al., 2012). This lack of observability and use of many aspects of the therapist's existing skill set challenge how we perceive the use of evidence in practice. This suggests that in order to understand what using evidence to inform practice looks like, it is important to understand the frameworks that guide clinical decision making.

2.7.1 A framework for engagement

Various factors contribute to successful engagement in evidence informed practice. In order to understand these factors and consider their interactions, an

occupational therapy framework was utilized. While there are many occupational therapy models and frameworks, this study sought to utilize one which presented a Canadian occupational therapy perspective. Three occupational therapy frameworks have the potential to effectively address these aspects: the Canadian Practice Process Framework (CPPF), the Person-Environment-Occupation (PEO) Model of occupational performance, and the Canadian Model of Occupational Performance and Engagement (CMOP-E).

The Canadian Practice Process Framework describes eight steps or action points in the occupational therapy process that are involved with the occupational change process (Craik, Davis & Polatajko, 2007). This framework explores the dynamic process undertaken by occupational therapists with their clients as they work to achieve their clients' goals. Although this framework provides a structure to understand the steps necessary to use evidence in practice, its structure does not provide a means to discuss the facilitators and challenges which impact using evidence in practice and was therefore not utilized in this study.

The Person-Environment-Occupation Model highlights the relationship between its three interrelated components of the person, the environment, and occupation. Occupational performance is defined as the outcome of the transaction of these three components (Law et al., 1996). Each of these aspects is broadly defined and the model recognizes that each aspect is dynamic and subject to change across the lifespan. The Canadian Model of Occupational Performance and Engagement also specifies three constructs of interest to occupational therapists; person, environment, and occupation. It is concerned with occupational performance, defined as the intersection of these aspects as well as engagement in an occupation (Townsend & Polatajko, 2007). While it is

similar to the PEO model with regards to its primary domains of interest, the CMOP-E defines key aspects within each of these three constructs and focuses primarily on the dynamic interaction between these aspects which contribute to engagement in an occupation (Townsend & Polatajko, 2007). This aspect of occupational engagement was an important consideration for this study and therefore influenced the selection of the CMOP-E as the framework for the study.

When the Canadian Model of Occupational Performance (CMOP) was initially developed by the Canadian Association of Occupational Therapists (CAOT) (Law et al., 1997), occupational performance was described as the "result of the dynamic relationship between person, environment and occupation" (p.30). Occupational performance results from the relationship between these components. Occupations are comprised of tasks and activities based on physical or mental processes and give meaning to the individual (Law et al., 1997; Townsend & Polatajko, 2007). Occupations occur within environments and are influenced by various aspects of the person who is completing those occupations.

Occupational therapists view the person holistically and consider the impacts of physical, affective, cognitive and spiritual dimensions upon the individual's ability to participate in personally meaningful occupations (Law et al., 1997; Townsend & Polatajko, 2007). The strengths and skills of the person contribute to their ability to engage in occupations. Occupational therapists believe that the environment in which occupational engagement occurs is comprised of aspects of the physical, social, cultural and institutional environments (Law et al., 1997; Townsend & Polatajko, 2007). These environments can positively or negatively impact an individual's ability to engage in occupations. The CMOP-E further develops a focus on engagement and performance

across these components (Townsend & Polatajko, 2007). Occupational therapists are typically concerned with the occupational performance and engagement of their clients, however therapists also engage in their own occupations which include occupational therapy practice.

The Canadian Model of Occupational Performance and Engagement (CMOP-E) provides a conceptual framework for discussing the components which contribute to successful implementation of evidence into practice (Townsend & Polatajko, 2007). Although the model specifies three performance components of the person and three aspects of occupation, these were not explicitly addressed in this study as they were not directly pertinent to the focus of the study. The three aspects of the person are the physical, cognitive, and affective performance components. They were not pertinent to this study, because it was surmised that the performance components necessary to practice as an occupational therapist were the same performance components necessary to engage in evidence informed practice. The occupation components of the model are organized by purposes into self-care, productivity, and leisure (Townsend & Polatajko, 2007). This study focused on the productivity component of occupations as engaging in occupational therapy practice is a component of productivity and unrelated to leisure. It was also presumed that individuals were able to engage in the self-care tasks necessary to enable them to practice as occupational therapists.

The interaction between the therapist, their practice environment, and the occupations that facilitate the use of evidence will be explored in order to develop a better understanding of occupational engagement in evidence informed practice. It provides a familiar structure for Canadian occupational therapists and will facilitate an

understanding of the interactions between aspects that contribute to occupational engagement. Each of the components of engagement in evidence informed practice will be reviewed and the aspects that make up each component will be considered.

2.7.2 Person components

Much of the focus on research utilization as an occupation has focused at the level of the individual practitioner. Their beliefs, attitudes, and engagement in the uptake and implementation of initiatives has been a focus in both occupational therapy and nursing research (Cramm et al., 2013; Damschroder et al., 2008; Greenhalgh, 2004; Rycroft-Malone et al., 2004; Thomas & Law, 2013). The experience, knowledge, and interests of the person have an influence on how they interact with evidence and how they integrate it into their clinical work. Greenhalgh et al. (2004) stated "People are not passive recipients of innovations. Rather, they seek innovations, experiment with them, evaluate them, find meaning in them, challenge them" (p.598). Characteristics of the person therefore play a central role in the way evidence is incorporated into practice.

Positive attitudes towards using evidence are important for occupational therapists. Therapists who use evidence in practice are often motivated to learn and develop their clinical skills (Greenhalgh et al., 2004; Metzler & Metz, 2010). However, an interest in evidence alone is not adequate to successfully implement evidence into practice (Humphris et al., 2000; Scott et al., 2012). Individuals who are effective in using evidence actively engage with the innovation or evidence and adapt it to meet their needs and the needs of their clients (Damschroder et al., 2009). They are flexible in how they

use the evidence (Kitson et al., 2008). Having the interest and the ability to use evidence and adapt it to their particular context is important for successful engagement.

Occupational therapists that effectively use evidence have the skills to seek out innovations and implement them into their practice. They are practitioners who have the skills and experience to use clinically relevant evidence in practice (Metzler & Metz, 2010). These may include research skills to acquire evidence, appraisal skills to evaluate the evidence, and clinical skills to use the evidence such as implementing a new treatment technique. Occupational therapists engaging in evidence informed practice use the innovation and do so with intention to successfully implement and maintain the use of new evidence (Greenhalgh et al., 2004). They are confident in their ability to implement the evidence into their practice (Rycroft-Malone et al., 2004). These therapists are also collaborative in using evidence and sharing innovations with colleagues (Lencucha et al., 2007). This promotes the use of evidence within the larger environment. Successful engagement with evidence therefore requires a clinician to have a variety of clinical and research skills, a willingness to learn and an ability to participate in activities that lead to change in their practice.

2.7.3 Environment components

All occupations occur within the context of an environment. The environment has an impact on how therapists engage in evidence informed practice. Some contexts are more conducive to implementation than are others, therefore it is important for the clinician to understand how various elements within these environments facilitate or challenge the use of evidence (Burke & Gitlin, 2012; Damschroder et al., 2009; Kitson et

al., 2008). The physical, institutional, cultural, and social environments all impact upon occupational engagement.

2.7.3.1 Physical environment

Therapists need access to the physical space and tools to support using evidence in practice. While changes to the built physical environment may be limited, the environment can be adapted to foster use of evidence. This can range from access to technology to support obtaining evidence, space to participate in discussions about new evidence, or storage space for the tools needed to implement new evidence into practice. Using technology in particular can foster occupational engagement without significant reliance on time and finances. Technology resources such as internet access, electronic journals, university libraries and online education can foster occupational engagement in a variety of practice environments, regardless of locally available resources (Metzler & Metz, 2010). The physical environment is an important dimension as it is immediately recognizable as contributing to the ability for a therapist to use evidence in practice.

2.7.3.2 Institutional environment

Occupational therapists are most effective at engaging in evidence informed practice if they are supported by the institutional environments of their practice setting. In many workplaces the institutional environment includes management structures and organizational policies and procedures. Management support and access to resources to participate in new learning and to implement evidence into practice are important to foster engagement among therapists (Metzler & Metz, 2010). Resources may include time and financial support to attend education, financial support for tools to implement

new evidence into practice, and time to devote to obtaining and implementing new evidence (Cramm et al., 2013; Damschroder et al., 2009; Kitson et al., 1998; Metzler & Metz, 2010). The support of senior leadership to change practice at a systems level (Cramm et al., 2013; Scott et al., 2012; Thomas & Law, 2013; Warner & Townsend, 2012) and facilitate sharing of knowledge across those systems also fosters engagement among clinicians (Leclair et al., 2013). Institutional support is necessary to implement initiatives and provide the needed resources to support continued use of evidence in practice. Ensuring that the occupation of engaging in evidence informed practice becomes embedded within the practice environment is also effected at the institutional level (Metzler & Metz, 2010). The institutional environment has a significant impact on the ability of therapists to continue to use evidence over time as this is the component of the environment with the financial resources and the capacity to change policy.

2.7.3.3 Cultural environment

Occupational therapists practice within a cultural environment. They belong to a culture within their workplace and a culture within the occupational therapy community. The cultural environment informs the values, beliefs, and norms of the community (Townsend & Polatajko, 2007). The context in which occupational therapists practice may impact on the process of engagement in evidence informed practice (Colquhoun, Letts, Law, MacDermid, & Missiuna, 2010). The use of evidence is more effective if implemented by a community of therapists as well as within an interprofessional team (Kitson et al., 2008; Rycroft-Malone et al., 2004). In this way, the cultural environment is an important driver of evidence use in practice.

Developing a culture of questioning encourages clinicians to adapt their practice environment to become one where evidence is sought out to guide practice (Law et al., 2004). This can include questioning about the services that are provided to clients or the theory that guides occupational therapy practice. It also encourages discussion with clients and among clinicians about how they practice. A culture of questioning can encourage occupational therapists to use evidence and to consider if they are providing occupational therapy services that best meet the needs of their clients.

2.7.3.4 Social environment

The social environment influences an individual's ability to engage with evidence in many ways. The social environment impacts interactions with others in day to day life, groups, and communities (Townsend & Polatajko, 2007). These intersecting and interconnected layers of relationships impact all aspects of engaging with evidence in practice as they influence interactions with others with regards to evidence.

An important aspect of engaging in evidence informed practice is collaboration with other therapists. Collaboration is a means to engage in implementation of evidence informed practice in both the occupational therapy and nursing literature (Kielhofner, 2005; Kitson et al., 2008; Lencucha et al., 2007; Thomas & Law, 2013). Collaboration can occur at multiple levels. It may be between peers, with local opinion leaders or clinical experts, or within larger communities of practice (Kielhofner, 2005; Kitson et al., 2008; Menon et. al, 2009). In settings where time and resources are limited, therapists often rely on the knowledge of colleagues to help support clinical decision making (Eyres & Unsworth, 2005; Lencucha et al., 2007; Robertson & Blaga, 2013). A knowledgeable

and experienced colleague can provide support in the practice environment to help facilitate implementation of evidence (Kitson et al., 2008; Thomas & Law, 2013). They can act as a resource to bridge the gap between clinical practice and research (Lencucha et al., 2007). Colleagues can provide mentorship and supports to foster occupational engagement among their peers (Leclair et al., 2013; Metzler & Metz, 2010; Rycroft-Malone et al., 2004). Since therapists may feel more comfortable using a colleague to support their decision making, these clinicians can become a beneficial resource to encourage and support their peers in engaging in evidence informed practice.

Supportive communities provide opportunities for learning which are mutually beneficial for all therapists and support occupational engagement in evidence informed practice. Partnerships between clinicians and those with expert knowledge can also be effective in encouraging the use of evidence.

Communities of practice are an important aspect of the social environment. In occupational therapy these communities provide support to foster the development and use of evidence among practitioners and increase therapist confidence and skill (Kielhofner, 2005; Nicholson, 2013; Thomas & Law, 2013). They provide opportunities to share knowledge among community members which provide support with implementation of new evidence into the practice environment (Lencucha et al., 2007; Warner & Townsend, 2012). These communities may include involvement of various team members such as clinicians and researchers, particularly within complex practice environments (Scott et al., 2012; Kitson et al., 2008; Lencucha et al., 2007). These communities encourage clinicians to practice in a way which fosters evidence informed practice and provide guidance and assistance when clinicians are faced with challenges.

Communities that include partnerships between researchers and clinical experts in practice support engagement with evidence by sharing knowledge between those individuals who generate evidence and those who use the evidence to support practice (Kielhofner, 2005; Leclair et al., 2013; Metzler & Metz, 2010; Rycroft-Malone et al., 2004). These partnerships are mutually beneficial for clinicians and academics. They allow clinicians to gain knowledge to guide their practice and can provide researchers with locally relevant data (Kielhofner, 2005). These partnerships create opportunities for therapists and researchers to have ongoing dialogue and may provide clinicians with access to supports and resources that may not otherwise be available. Participating in communities of practice encourages therapists to share and exchange knowledge (Warner & Townsend, 2012).

Another collaborative role that has been suggested is the development of occupational therapy positions that span diverse practice settings. This role could include joint appointments within a university and clinical practice, clinician-researcher or a joint clinical and leadership role. Occupational therapists in these roles could be an effective resource for negotiating the need to bring together knowledge and resources to facilitate engagement across practice settings (Cramm, et al., 2013; Thomas & Law, 2013). Participating in these collaborations encourages sharing knowledge and the development of a support network to foster engagement in evidence informed practice.

2.7.4 Occupation components

If evidence informed practice is an occupation, then occupational therapists must have the skills to support its implementation. Occupation includes the component

activities and tasks that are done by the individual (Law et al., 1997). As previously discussed, an occupation is more than a group of activities or tasks. A task consists of a single action or set of actions which involve using a tool while an activity consists of a set of tasks. Occupations include a set of meaningful activities that are performed regularly (Polatajko et al., 2004). Occupations are culturally defined and have meaning and value to the individual and within a culture (Law et al., 1997). Occupational therapists are primarily concerned with occupational performance or the actual carrying out of an occupation which is carried out by the individual within an environment (Law et al., 1997). It is important to consider how the tasks and activities which comprise using evidence to guide practice can be considered as an occupation for therapists. As previously stated, one of the challenges to understanding how occupational therapists use evidence to guide practice is that it is difficult to observe. Many of the skills that are necessary to be effective at using evidence to inform practice are the same skills that occupational therapists regularly employ as part of providing occupational therapy services to their clients. In this way, one must explore the opinions and beliefs that occupational therapists hold about their perceptions of using evidence in practice, the value that using evidence has for therapists, and the steps that they follow to engage in using evidence to guide their practice.

Occupational therapists must employ a variety of skills to effectively use evidence to guide practice. Some key skills outlined in the Profile of Practice of Occupational Therapists in Canada (CAOT, 2012) include; applying expertise and professional reasoning, demonstrating skilled and selective use of occupation and interventions to enable occupation, engaging in effective dialogue with clients and other audiences about

the evidence, advocating for the occupational potential and occupational engagement of clients through the use of evidence, maintaining and enhancing personal competence through ongoing learning, and critically evaluating information to support client, service and practice decisions.

In addition to knowledge and practice skills, occupational therapists require tools and resources to support engagement in evidence informed practice. Therapists need access to the tools that allow them to implement evidence into their practice. Resources that support obtaining, reviewing, and evaluating evidence are important aspects of the occupation of using evidence. These may include documents to help evaluate new evidence, access to computers, or the tools to use a new resource such as an assessment kit or wheelchair seating components.

Occupational therapists also need skills to obtain, appraise, and implement evidence into practice. These may include the skills to understand and review evidence, reviewing critical appraisal tools and developing critically appraised topics (Law et al., 2004). It may also include the use of occupational therapy process to integrate scholarship into practice (Bennett & Bennett, 2001). Empowering therapists with the clinically relevant resources they need to implement new evidence into practice is a necessary and important step in all areas of occupational therapy practice.

Self-reflection is an important component of engaging in evidence informed practice (Greenhalgh et al., 2004; Leclair et al., 2013; Thomas & Law, 2013). Reflection includes understanding of the norms and values of both the clients who are using occupational therapy services and the therapists who provide those services. Therapists

who are able to reflect upon their learning needs and the needs of their clients will be more effective in implementing evidence in their practice (Metzler & Metz, 2010). Recognizing the gaps in their current practice may motivate therapists to seek out the evidence they need to be effective in their practice.

It is important that using evidence is adopted into routine work. This encourages ongoing use of evidence in occupational therapy practice (Greenhalgh et al., 2004; Kitson et al., 1998). Establishing evidence into routine work may prove to be particularly effective at engaging occupational therapists throughout the continuum from the early stages of adopting evidence into practice through the development of collaborative communities of practice where clinicians participate in clinically relevant research (Damschroder et al., 2009, Greenhalgh et al., 2004; Metzler & Metz, 2010). By embedding evidence into the daily occupations of therapists, it can become integrated into the practice context for occupational therapists. The occupation of using evidence in practice requires therapists to have many skills. Having these skills supports occupational therapists to effectively engage with evidence and integrate it into their practice.

2.8 Engagement in Evidence Informed Practice

Having an occupation is not the same as performing an occupation or engaging in an occupation. While occupational performance denotes the execution of an occupation (Law et al., 1997), occupational engagement is broader in scope in its perspective on occupation. It moves beyond performance and considers more contextual factors including but not limited to the nature, intensity, degree of establishment, extent, competency, level of importance, and degree of satisfaction an occupation brings to the

individual (Townsend & Polatajko, 2007). In this way, occupational engagement considers the many factors that influence performance of an occupation and denotes a broader and more inclusive perspective on occupations. This is true for occupations of clients and for the occupations of therapists. It is important to understand not only the occupations that therapists have which enable them to interact with evidence, but the ways in which they are participating with the evidence in order to support their practice. Engaging with evidence in practice is the active process of interacting with evidence and considering it within the context of the therapist's practice in order to inform occupational therapy practice. This is a key idea that will be discussed throughout the subsequent chapters of this thesis.

Using evidence in practice is a dynamic process and there is a transactional relationship between each of the components whereby each of the person, environment, and occupation components has an impact on one another and influences occupational engagement (Townsend & Polatajko, 2007). The process of engaging in evidence informed practice is completed by the individual within an environment or context (Damschroder et al., 2009; Kitson et al., 1998; Metzler & Metz, 2010). There is a growing body of research that has explored the personal characteristics of evidence informed practitioners and the characteristics of environments that foster the use of evidence. However there remains a gap in our understanding of what is involved in the occupation of using evidence to guide occupational therapy practice. This also limits an understanding of what fosters engagement in evidence informed practice. It is important to learn more about what therapists consider to be involved in the occupation of using

evidence in practice and how therapists are engaging in these occupations. This study explores this aspect of occupational therapy practice.

2.9 Conclusion of the Literature Review

With the increasing demands on health care providers to ensure that the interventions they provide are based on best available evidence, it is important for occupational therapists to understand how to best meet the demands of a changing practice landscape. Occupational therapists must ensure that they have the necessary skills to engage in evidence informed practice to ensure that they are meeting the needs of their clients.

Although evidence informed practice is espoused as an important part of occupational therapy, its implementation into clinical practice remains challenging. Using evidence from multiple sources including practice knowledge, client knowledge and research evidence, therapists can implement occupational therapy interventions which best meets the needs of their clients (Dunn & Ball, 2008; Law et al., 2004). Undertaking these steps comprises an important occupation for therapists.

Researchers have identified many of the steps necessary to successfully implement new innovations into the practice environment (Damschroder et al., 2009; Greenhalgh et al., 2004; Rycroft-Malone et al., 2004). Yet despite this growing area of study and support for the implementation of evidence into practice, there remains a gap between theory and practice. This is particularly challenging for occupational therapy practice, where flexibility and adaptability to each individual clinical situation is necessary to meet the needs of clients. One way to begin to bridge this gap is with a

greater understanding of how occupational therapists are presently engaging in evidence informed practice.

2.10 Purpose

The purpose of this study is to understand how occupational therapists are currently using evidence in their practice. With a greater understanding of the dimensions of person, occupation and environment and how they impact occupational engagement, we can better understand how therapists engage in evidence informed occupational therapy practice.

2.11 Research Question

The following question was addressed in this research study:

How is engagement in evidence informed practice an occupation for therapists?

To best answer this question, these additional sub-questions were also asked:

1. How do occupational therapists use evidence in their practice? Does it meet the criteria for an occupation rather than a task or activity?
2. In what ways do occupational therapists value evidence in their practice? To what degree is using evidence in practice a choice or an expectation?
3. What are the personal characteristics of occupational therapists who incorporate evidence into their practice?
4. What characteristics of the environment impact therapist engagement in evidence informed practice?

CHAPTER 3: METHODS

3.1 Research Design

Qualitative research is a common method used in health disciplines to better understand meaning and experience (Starks & Trinidad, 2007). It frequently takes place in the natural setting of the participant, and multiple methods of data collection can be used to understand the phenomena being studied (Creswell, 2003). There are several traditions of qualitative inquiry, each of which have developed from a philosophical tradition and employ a particular set of methods to understand and analyze data (Creswell, 2003, Luborsky & Lysack, 2006; Starks & Trinidad, 2007; Patton, 2002). Most types of qualitative research seek to understand the meaning, beliefs and views of participants, to understand the perspectives of a variety of individuals, and to understand the lived experiences of people (Luborsky & Lysack, 2006).

Qualitative research is well suited to explore personal experiences and to gain a greater understanding of a process which is not easily measured. Occupational therapists have embraced qualitative research as a way to understand the experiences of their clients. It is also well suited to understanding the lived experiences of therapists (Luborsky & Lysack, 2006). The purpose of this study was to understand how occupational therapists are using evidence in their practice. Qualitative research allowed participants to share their beliefs, their experiences, and the tasks and activities they completed in order to use evidence to support their practice. It allowed therapists to explore how and why they used evidence in their practice.

3.2 Methodology

Qualitative studies that adhere to a particular methodological tradition employ particular methods to gather analyze, and interpret data that is framed according to their philosophical viewpoint (Starks & Trinidad, 2007). In contrast, generic qualitative research is not characterized by a particular tradition or methodology and instead focuses on a greater understanding of an experience (Caelli, Ray & Mill, 2003). Sandelowski (2000) suggests that qualitative description is beneficial when a researcher wishes to describe the phenomenon being studied rather than interpret it through a particular framework or lens. In qualitative description, the researcher is able to collect as much data as is necessary to understand the area of study and describes this data using everyday terms as they relate to the event or area of study (Sandelowski, 2000).

The purpose of this study was to understand how occupational therapists are using evidence in their practice. Evidence informed occupational therapy practice is an emerging area of study in Canada. In particular, there is limited evidence exploring the ways in which occupational therapists were actually using evidence to support their practice or the extent to which it is an activity or an occupation. A generic qualitative approach helped develop a greater understanding of therapists' experiences.

This study used the CMOP-E as a framework to explore engaging in evidence informed occupational therapy practice. Using a model that is well established in Canadian occupational therapy practice provided a structure and used language that was familiar to the participants in this study. It also provided a framework for discussing the occupations of therapists using the same theoretical constructs and language they apply to understanding the occupations of clients.

The CMOP-E provides a framework for discussing the occupation of evidence informed practice for therapists (please refer to figure 1). This model is a graphical representation of the domain of concern for occupational therapists and illustrates the relationship between aspects of person, environment and occupation.

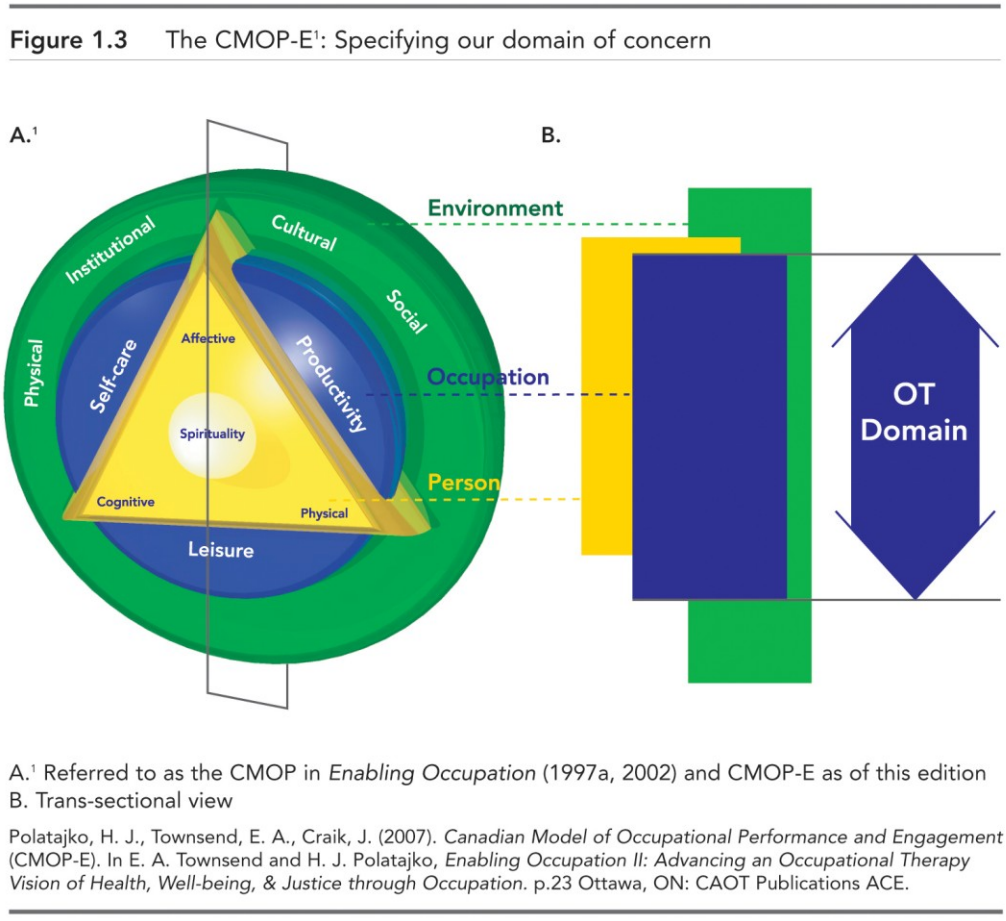

Figure 1: Canadian Model of Occupational Performance and Engagement Figure1.3 (CMOP-E) Adapted with the permission of CAOT Publications ACE from Canadian Model of Occupational Performance in Polatajko H., Townsend E., Craik, J. (2007). Enabling Occupation ll: Advancing an Occupational Therapy Vision for Health, Well Being, & Justice through Occupation. Ottawa, ON, CAOT Publications ACE. p. 23. (please refer to Appendix J for letter of permission to use figure)

The model is an integral part of Canadian occupational therapy practice, it is used to explore the interactions between aspects that contribute to occupational engagement for clients (Townsend & Polatajko, 2007). The CMOP-E will be used in this study to

explore each of the components that contribute to occupational engagement in evidence-informed practice; separately as well as the ways in which they interact.

3.3 Sample Selection and Recruitment

3.3.1 Study Population

Study participants were sampled from the population of occupational therapists who worked at a tertiary care hospital in Winnipeg. This facility was a teaching hospital that valued using evidence to support practice for all their employees. The facility employed approximately 80 occupational therapists including the researcher. Therapists were spread out over 5 separate satellite offices with different reporting structures to managers from programs and within the discipline.

Therapists provided services to clients from diverse socioeconomic backgrounds and a wide geographic area, depending on the area of practice. Areas of clinical practice included: acute care, musculoskeletal injuries, neurological and musculoskeletal rehabilitation, and mental health. Therapists worked with both adult and pediatric populations and saw clients in both inpatient and outpatient settings. They worked in clinical practice, research capacities, as well as supervisory and management roles. Therapist experience varied from recent graduates to those with many years of practice experience. Using evidence to support practice was a familiar topic within this organization. Evidence informed practice was supported in principle in occupational therapy and this study was supported by occupational therapy leadership at the centre.

3.3.2 Sample

This study sought to understand a breadth of therapist experiences and a diversity in therapist perspectives across many practice settings. This was achieved by using stratified purposeful sampling. The goal of this strategy was to capture the greatest participant variation within a small population (Patton, 2002). This greater variation allowed the study to capture multiple experiences and perspectives. Occupational therapists working across a variety of practice contexts within the facility were recruited for this study.

3.3.3 Recruitment

This study employed two recruitment strategies. First, an email request was sent to all therapists working within the facility inviting them to participate in the study. The email included information on the purpose of the study, time commitment, potential risks and benefits of participation in the study, as well as contact information for the investigator. Please see Appendix A for a copy of the recruitment email. The Occupational Therapy Department manager who is also the Discipline Director provided written permission for the investigator to recruit from department staff. Please see Appendix B for this letter.

Email communication was selected for recruitment since all staff members had email accounts and a variety of departmental information was circulated in this manner. This method was used by other research studies within the department to recruit participants, and was a familiar method for therapists to receive information. Email also required minimal time and costs to prepare and deliver but reached a large number of potential participants. Interested potential participants responded to the email indicating

they wanted to participate in the study. To supplement the email communication, a second recruitment strategy was employed. The researcher gave a brief presentation to staff at a staff meeting shortly after the recruitment email was sent. This was done to increase the opportunity for all therapists to hear about the study.

Participation was sought from occupational therapists who worked across the centre in a variety of practice settings. Recruitment continued until the desired number of participants was achieved to reach saturation of themes. Diversity within that group of participants was also sought to obtain a greater breadth of information about the beliefs and experiences of therapists (Taylor & Kielhofner, 2006). This information was recorded on a recruitment matrix (Appendix D). This tool assisted the researcher to identify when diversity had been achieved within the sample of potential participants. Some individuals expressed an interest in the study to the researcher but did not reply to the study invitation. The recruitment email was re-sent to these individuals within the following month to inquire if they still wished to participate in the study. This strategy was effective and yielded additional study participants.

Participants were recruited from a variety of practice settings, but not all areas were represented after the initial recruitment. In order to solicit additional participants from other practice areas a second targeted recruitment email (Appendix I) was sent to occupational therapists working in mental health and pediatrics. This resulted in additional participation which increased the diversity within the sample.

A total of 10 occupational therapists from a variety of practice areas participated in this study. Preliminary data analysis began with the first interview until completion of

10 interviews when it was felt that data saturation had been achieved. Data saturation was the point when participants were no longer contributing any new information to answer the research question (Creswell, 2003; Patton, 2002).

3.4 Data Collection Strategies

There are many methods of collecting qualitative data. These include observations, interviews, self-reports, focus groups and document reviews (Creswell, 2003; Taylor & Kielhofner, 2006). Interviews are particularly useful when a phenomenon cannot be directly observed (Creswell, 2003). Using evidence in occupational therapy practice is largely an internal process which is difficult to observe. Information about the activities which the therapist does to engage in using evidence in practice in combination with the therapist's perspective of how they use evidence is needed in order to best understand the experience of occupational therapists. Two data collection strategies have the potential to be effective in this type of investigation: interviews and focus groups.

A focus group can allow for dynamic interactions between participants which will generate data that might not otherwise emerge from individual interviews (Hollis et al., 2002; Taylor & Kielhofner, 2006). While there are many advantages to using a focus group, there are also challenges and potential pitfalls. There is a risk of conformity to the group and participants with differing views may choose not to fully participate in the discussion and this may have an impact on validity of the data obtained (Hollis et al., 2002). Furthermore, it may be difficult to determine if those who are not participating fully in the discussion are doing so because they agree or disagree with the predominant views of the group (Taylor & Kielhofner, 2006). In contrast, in-depth interviews allow

the researcher to probe ideas and obtain detailed information from participants about a given topic (Lysack, Luborsky & Dillaway, 2006). Challenges to interviews include large volumes of data to review, the need to ensure that the interviewer has the necessary skills to obtain relevant and meaningful information and ensuring the quality of the data obtained (Lysack et al., 2006). Although both methods were considered, in-depth interviews were selected as they encouraged greater exploration of the individual experiences of occupational therapists.

3.4.1 Interview Data

Two types of data were collected from participants: demographic information about the therapists and their practice as well as the data collected during their qualitative interview. The purpose of the demographic information (Appendix C) was used to assist with the sampling process and provided descriptive information about the sample of participants.

In-depth interviews allow the researcher to collect a large breadth of information about an individual or subject of interest (Taylor & Kielhofner, 2006). Qualitative interviews encourage participants to share information which can contribute to the emerging body of knowledge on a particular topic (DiCicco-Bloom & Crabtree, 2006). Interviews may vary from structured to un-structured (Patton, 2002; Taylor & Kielhofner, 2006). The greater the structure in the interview the less interviewer bias as there is little interpretation of responses, however too much structure and the interview no longer captures the perspectives of the participants. Semi-structured interviews allow for greater detail to be collected from the participant while allowing the interviewer to maintain

some control over design and sequence of questions (Lysack et al., 2006). Individual in-depth interviews are used "to co-create meaning with interviewees by reconstructing perceptions of events and experiences related to health and health care" (DiCicco-Bloom & Crabtree, 2006 p.316). Semi-structured interviews allowed the researcher and participant to explore how the participant perceived and used evidence. In this way it was an effective strategy for obtaining data from the participants. In-depth semi-structured interviews were the primary method of data collection as these best captured the breadth and depth of the experience of occupational therapists.

3.4.2 Tool

Two data collection tools were developed for the study. The first was a screening tool (Appendix C) that provided demographic information designed to assist with ensuring variation in sampling. The second was a semi-structured interview guide (Appendix F). Several styles of questions were included. Patton (2002) identifies six types of interview questions: experience and behaviour questions, opinion and values questions, feeling questions, knowledge questions, sensory questions, and background/demographic questions. Experience and behaviour questions are designed to elicit information about observable events; how a person spends their day and what activities and tasks are typically completed (Patton, 2002). Opinions and values questions are designed to explore how people think about an issue, while feeling questions are aimed at eliciting emotional responses about a topic or experience (Patton, 2002). Knowledge questions solicit factual information from the individual while sensory questions seek to understand the sensory experiences of the person in relation to a particular location or activity. Background and demographic information are useful in

understanding the individual in relation to others (Patton, 2002). While each of these types of questions can be asked, some are more pertinent to this study than others. In this study, the following types of questions were included: experience and behaviour questions, opinions and values, feeling questions, knowledge questions, and demographic questions.

The interview guide generated several open-ended questions. Using open-ended questions encouraged the researcher to be flexible and responsive to the themes that emerged (DiCicco-Bloom & Crabtree, 2006; Hammell, 2002). These specific questions were informed by the literature review and designed to delve more deeply into aspects of the research issue in order to answer the research question (DiCicco-Bloom & Crabtree, 2006). In some instances, primary questions had additional follow-up questions to solicit more information from the participant about a particular concept. The questions evolved over the process of completing several interviews to include additional areas of inquiry to solicit further information about the perceptions and experiences of occupational therapists. This is common in qualitative interviewing. Please refer to Appendix F for the interview guide used for this study.

3.4.3 Data Recording Procedures

Interviews were completed in-person outside of work hours in a location within the hospital campus. Locations favoured by participants were quiet, private and located outside the department. Demographic information was confirmed during the interviews using the same questions from the screening tool (Appendix C) to check for accuracy. Consent forms were reviewed, and informed consent was obtained before starting the

interviews. Participants were reminded of the purpose of the study before completing the semi-structured interview. All interviews were recorded using a password protected digital audio recording device for ease of transcription and review. Data was transferred from the device following each interview and the audio data was transcribed verbatim by the investigator by hand. A few hand-written field notes taken during the interview (Appendix E) noted any pertinent observations about the participant and the session. These were kept on hand for analysis.

3.5 Data Analysis

The purpose of data analysis was to gain an understanding of the experiences of participants and the meaning of those experiences (Fossey et al., 2002; Rubin & Rubin, 2005). Data analysis in qualitative research was an ongoing process consisting of multiple reviews of the data. It is this process that turned the data into findings (Patton, 2002). The process of analysis was both reflexive and interactive as the researcher sought to gain insights from the data and reflect the experiences of the participants (Rubin & Rubin, 2005; Sandelowski, 2000). The goal of data analysis in this generic qualitative approach was to describe the data that was obtained. Content analysis was particularly important in this type of study. Content analysis was the process of making sense of the meanings in the data (Paton, 2002). The process of establishing and reviewing the data was iterative.

Analysis occurred concurrently with data collection and started once the first interview was completed (DiCicco-Bloom & Crabtree, 2006; Sandelowski, 2000). Beginning analysis at this stage facilitated making changes to interview questions to

clarify any ambiguous information (Rubin & Rubin, 2005; Paton, 2002). This process of concurrent data collection and analysis also helped the researcher determine when no new information was generated from interviews. This helped determine when data saturation was achieved and no additional data was required (Paton, 2002). Ten interviews were completed in this study, at which time no new information was generated and data saturation was achieved.

Data analysis involved exploring the data and comparing and contrasting elements of the data. This helped to develop a greater understanding as more data was obtained and reviewed (Fossey et al., 2002). The first step of data analysis consisted of organizing and reviewing the data that was obtained. Audio recordings of the interviews were transcribed by the investigator then were reviewed for accuracy along with field notes. The transcript was reviewed and the investigator made notes summarizing the content of the data. The investigator then made notes about the data by hand which were also entered into a word processing program.

The initial steps of analysis focused on developing codes. Codes were labelled segments of data that expressed a particular idea or content (Fossey et al., 2002). They were developed using the language of participants (Creswell, 2003). Initially codes were generated as labels to identify themes within the data (Fossey et al., 2002; Sandelowski, 2000). Once codes were identified and definitions were developed these were used when reviewing all interviews. These codes were descriptive, interpretive, and identified patterns in the data. A list of codes was created early in the process of analysis (Patton, 2002). Over time codes were modified in order to refine the meanings of the codes with subsequent interviews.

Analysis progressed and initial codes were confirmed, and evolved over time. More narrow codes were merged into broader ones over time (Patton, 2002). For this study the investigator had their thesis advisor review the data and codes at several points in the data analysis to discuss the meaning of codes and themes to check potential biases of the researcher.

Interview summaries were also generated in this study. The summaries explored the ideas and themes that emerged from the data and included both description and interpretation. These summaries were sent to participants to confirm the accuracy of the data they provided during their interview and determine if the themes accurately represented their experiences and perspectives. The summary also included potential quotes for participants to review. Participants also had the opportunity to review the full transcript of their interview if they desired. This participant review was a form of member checking and was an important part of ensuring trustworthiness (Fossey et al., 2002; Hammell, 2002). Participants were asked to review the summary and provide any feedback or questions within three weeks of receiving the review. After receiving feedback or after the three week review period had passed, further analysis continued.

After this review of the codes, notes that identify thoughts, impressions, and interpretation of the data developed (Creswell, 2003; Fossey et al., 2002, Patton, 2002). These memos included explanations of what was seen in the data, areas of agreement or contradiction, patterns, reflections or intuition of the researcher (Fossey et al., 2002). This helped identify broader themes that emerged within the data. These broader themes linked together several ideas that emerged from the data that recurred for a single participant or emerged across multiple participants (Rubin & Rubin, 2005). Data

saturation was achieved when further reviews of the data no longer yielded additional themes (Patton, 2002).

The final step in data analysis was interpretation and generating meanings from the data (Creswell, 2003). This step included exploring the connections across the data and incorporated the thoughts and experiences of the researcher (Fossey et al., 2002). The interpretation went beyond the data and expressed meaning, provided possible conclusions, dealt with rival explanations, and accounted for irregularities in the data (Patton, 2002). To ensure that the data was collected, analyzed and interpreted accurately and conveyed the experiences of participants, trustworthiness was ensured throughout the process of data analysis.

3.6 TRUSTWORTHINESS

It was important for this qualitative research to be rigorous. Rigor in qualitative research ensured the quality of the research. There were many strategies which can be used to ensure the trustworthiness of qualitative research. Four strategies commonly employed were credibility, transferability, dependability, and confirmability. Each of these strategies was utilized in this study.

3.6.1 Credibility

Credibility ensured that the truth or reality of multiple participants was represented in the data (Krefting, 1991). This was achieved using member checking and triangulation. Member checking was achieved by receiving participant feedback on their interviews. All participants were provided a copy of their interview summary and some also selected to review a verbatim transcript of their interview. Participants provided

feedback to the researcher to confirm or question the researcher's interpretation of the interview.

Triangulation is an important aspect of ensuring trustworthiness. Triangulation takes many forms including; triangulation of methods where data is collected using various techniques, triangulation of data sources where multiple pieces of data are collected, theoretical triangulation where multiple theoretical perspectives are tested, and triangulation of investigators where multiple investigators with diverse backgrounds are part of the research team (Krefting, 1991). This study demonstrated triangulation of methods by including two sources of data; demographic information and interview responses. Triangulation of investigators was achieved with a review of the analysis of the first few interviews by the investigator's thesis advisor. Member checking with all study participants also provided additional perspectives on the data analysis.

It was important to ensure that accuracy and transparency in the data collection process was observed (Hammell, 2002). The primary investigator was a colleague of the research participants and while most participants were in comparable clinical roles there was a risk of interviewer bias (Taylor & Kielhofner, 2006; Hammell, 2002). The role of the researcher and their biases was also explored along with other methods of ensuring trustworthiness and rigor in data collection and analysis (Starks & Trinidad, 2007; Hammell, 2002).

3.6.2 Transferability

Transferability or applicability was the ability to generalize the data. It was important that there was adequate description of the details of the study so that a reader

could determine if it would be applicable in another context (Krefting, 1991). Demographic information was collected and summarized to give information about the study participants, where they were sampled from, and provide information about the setting and the characteristics of the participants.

3.6.3 Dependability

Dependability or consistency strategies ensured that the same findings could be obtained if the study was replicated (Krefting, 1991). The steps taken during the study were documented and the process of data analysis was outlined. The researcher's bias was included as was documenting the steps of analysis in the form of an audit trail, and peer debriefing (Krefting, 1991).

3.6.4 Confirmability

Confirmability ensured that the findings are derived from the data (Krefting, 1991). Participant quotes were used throughout the discussion of the study findings to show how the findings were derived from the data and to explore the researcher's bias (Hammell, 2002). This demonstrated confirmability of the data.

3.7 Ethical Considerations

Ethics approval was received from both the Dalhousie University Health Sciences Research Ethics Board and the University of Manitoba Human Research Ethics Board. Approval from both boards was needed as the study took place at a facility in Winnipeg where all research completed at this facility was reviewed by this ethics review board.

Informed consent was obtained from all participants before completing their interviews and each participant was sent the consent form to review ahead of their interview (see Appendix E) and they were encouraged to contact the researcher with any questions or concerns. All participants were given a participant identifier upon completion of the screening tool (Appendix C) which was used throughout the remainder of the study. The screening tool and consent forms were kept separately in secure locked cabinets within the researcher's home. All electronic data from the audio recorder was transferred from the password protected device to the researcher's password protected computer.

Interviews were conducted outside of work hours and outside of the occupational therapy department to encourage participants to feel comfortable sharing information with the researcher. The interviews used informal language and interview questions (Appendix F) encouraged a dialogue between the researcher and participant. The questions were designed to understand the perspectives and experiences of participants, and were non-confrontational

There was a potential risk that participants may feel uncomfortable sharing their experiences of using or not using evidence to a researcher who is a colleague; however the challenges to applying evidence to practice was a current topic of discussion among therapists so it was not unusual for colleagues to share these challenges. There was a potential risk that participants may not want to disclose negative information to a colleague. Some may have disclosed more, because the researcher-colleague is an "insider". As an insider the researcher understood their challenges. Being an insider presents opportunities for developing greater rapport and better understanding of the

meanings of the experiences of participants (McEvoy, 2001). In addition, McEvoy (2001) suggested having a "shared experience may act as a catalyst to increase the depth of an inquiry" (p.57). Participants did not have to answer any questions they were uncomfortable with and were able to ask for clarification or explanation at any point during the interview.

No individual data was shared with the department and all efforts were sought to ensure participant confidentiality. It was important that participants felt able to share information freely and know that their confidentiality was maintained throughout the study (DiCicco-Bloom & Crabtree, 2006). Anonymity presented a greater challenge as the study participants were part of a relatively small and familiar community of occupational therapists working within the facility. In order to minimize this risk, only descriptive statistics about the overall sample are presented in this thesis. This was done to minimize the risk of identifying individual participants. Direct quotes were presented without demographic information in order to minimize the possibility that as participant can be identified. Any other potentially identifying information was also removed from quotes and participants had the opportunity to decide if they were comfortable with all quotes that were included. Despite these steps a small degree of risk to anonymity remained, and it was important that the participants were informed of this risk before deciding to participate in the study.

CHAPTER 4: FINDINGS

4.1 Introduction

This chapter reviews the data collected during participant interviews in order to answer the research question: how is engaging in evidence informed practice an occupation for therapists? Participants shared their beliefs and experiences of using evidence in practice during their in-depth interviews. The findings from those interviews are discussed

Interviews allowed participants to explore how they used evidence to support their practice. They facilitated sharing beliefs and experiences with using evidence in practice. Participants also shared their perceptions and beliefs about how the environment influenced their ability to use evidence in practice. For all individuals, using evidence was a highly valued and integral aspect of their practice. This chapter explores the data collected in consideration of the research question.

The occupation of engaging in evidence informed practice was central to the research question. However person-level factors influenced how an individual engaged with the evidence. The beliefs and skills of the individual also supported their ability to engage with the evidence. All occupations occurred within a practice environment where participants worked which influenced how they engaged with the evidence. In order to understand how personal and environmental factors influence the occupation of engaging in evidence informed practice, the CMOP-E was used as a framework to explore the relationships between each of these components.

4.2 Demographics

Demographic information was gathered from the study participants in order to provide context for the findings. The study participants were all occupational therapists who worked at one tertiary care hospital in Winnipeg. This facility provided a mix of both general and specialized services, some of which were not available elsewhere in the province. Demographic information was obtained from participants to ensure that participants represented a variety of practice contexts, and to understand how the experiences of occupational therapists informed their perspectives on evidence informed practice.

Ten occupational therapists working in various roles throughout the facility participated in this study. These participants worked in both inpatient and outpatient practice with clients throughout the healthcare continuum including acute care, musculoskeletal injuries, and rehabilitation. This sample included participants from most areas of practice with the exception of those working in mental health. Participants provided occupational therapy services to adult and pediatric client populations. Four participants practiced for less than ten years while the remaining six practiced for greater than ten years. There was an equal representation of clinicians who graduated with an entry to practice Masters Degree or a Bachelor's Degree in occupational therapy. Although most participants cited their educational experiences as being related to their entry to practice degree, some participants had also undertaken advanced studies including research based graduate level training. Participants worked both as clinicians and in advanced practice roles, with the majority of participants identifying their primary role as a clinician.

4.3 Summary of Findings

Three main themes and eight sub-themes emerged from interviews with participants. These themes represented the key concepts that emerged from the data. The CMOP-E was used to provide a framework for discussing and understanding the findings that reflected aspects of the person, their environment, and engagement in the occupation of evidence informed occupational therapy practice. Many of the findings influenced more than one theme. There were relationships between some of the ideas discussed by participants that were consistent with what the CMOP-E identifies as transactional relationships between aspects of the person, occupation, and environment (Townsend & Polatajko, 2007). In order to best understand each of these findings they were discussed in the theme where they had the greatest influence.

The first and most significant theme that emerged from interviews was that participants engaged with evidence in their practice. This was supported by two sub themes: 1a) individuals engaged in occupations that supported using evidence in practice, 1b) they used the evidence to support practice change. These sub-themes reflected the ways participants engaged with evidence.

The second theme that emerged was the person-level factors that influenced how individuals engaged with evidence. Aspects of the individual were explored in this theme. Two sub themes were discussed: 2a) individual beliefs that supported using evidence and 2b) skills that supported using evidence in practice.

The third theme that emerged was that the environments where individuals practice influenced engagement with evidence. Participants interacted with four aspects of the environment which formed four sub themes: 3a) the physical environment

influenced engagement, 3b) the institutional environment influenced engagement, 3c) the culture of the practice community valued using evidence in practice, and 3d) a supportive social environment facilitated using evidence in practice.

4.4 Participants engaged with evidence in their practice

Engaging with evidence was the key theme that emerged from this study. All study participants expressed various ways that they engaged with evidence in their practice. Participants sought evidence to answer clinical questions for either individual clients or groups of clients. Engagement was an interactive process and participants discussed many ways that they interacted with evidence. They discussed the occupations they completed that facilitated using evidence in their practice and the various considerations that informed their decisions regarding using evidence. These emerged as two distinct sub themes: individuals engaged in occupations that supported using evidence in practice, and participants used the evidence to support practice change.

4.4.1 Individuals Engaged in Occupations that Supported Using Evidence

One important aspect of engagement was interacting with evidence as part of occupational therapy practice. Participants completed a number of activities that formed the occupation of engaging with evidence. Participants described these activities in relation to, but separate from, other aspects of their work as occupational therapists. They were consumers of evidence and knew how to acquire, evaluate and implement evidence into practice. Participants also interacted with evidence by sharing and translating evidence within their work environment.

4.4.1.1 Consumers of evidence

Participants were consumers of multiple forms of evidence and used the evidence they obtained to support their practice. They interacted with evidence in several ways including seeking evidence to support practice and interacting with new evidence. Participants took ownership of their own learning and sought evidence to support their practice. One participant explained: ***"I mean it's kind of up to us to be self-learners in that respect, right? People aren't telling us what to do, what the evidence is, go use it. We have to sort of figure that out" (participant 5).*** This participant felt a responsibility to improve their practice by seeking out evidence. They chose to engage with the evidence and they felt that as a professional they were responsible for their own learning. Another participant explained: ***"it's really seeking out opportunities though... for example people aren't going to come to you and send an email 'oh, there's a workshop" (participant 1).*** Participants made learning a priority by looking for opportunities to develop their knowledge to support their practice; using evidence was a priority regardless of barriers in their environment.

Engaging with evidence involved not only seeking out learning but also interacting with evidence to obtain, review, and implement new evidence into practice. One participant shared their experience of reviewing evidence in relation to their clinical work: ***"I've been involved with a committee that we're developing... clinical practice guidelines in [area of practice]... we went through systematic reviews and developed [the] clinical practice guidelines" (participant 7).*** This participant was a skilled consumer of evidence and applied it to reviewing evidence and participating in creating an evidence informed document that supported practice.

Participants made using evidence a priority in their practice. They valued using evidence and spent time interacting with new evidence in order to support their clinical work. This required the therapist to use the skills to support evidence informed practice in conjunction with their clinical skills in order to effectively implement new evidence. One participant explained:

> ***" So you know it definitely takes more time but I think to be... a confident practitioner you have to... take all that and use it all and share as much as possible with people... even if it does take extra time" (participant 5).***

This participant chose to implement interventions based on best practice evidence even when time was limited because they valued its impact on their practice. They made using this evidence and sharing it a priority despite the time constraints of their practice. Even when resources were limited they made a choice to engage with the evidence. They identified that the benefits of engaging with the evidence outweighed the challenges. This was an active process that moved beyond performing the occupation of using evidence to engaging with the evidence by considering the evidence with regards to its meaning, significance for clients, and their practice context.

4.4.1.2 Sharing evidence

Participants shared evidence in several ways and with different audiences. Evidence was shared with colleagues to foster learning and support practice change. Evidence was shared with clients to explain and support occupational therapy interventions. Most reflected on the importance of translating it to make it relevant for their audience. Evidence was not simply applied; it needed to be adapted and translated to

meet the needs of the client within the practice environment. Sharing evidence with clients was more involved than just explaining study findings. One participant explained:

> ***"with clients I feel that... my job is to present the evidence in a way that is not very clinically oriented, in a way that speaks to them as a person in terms of relevance... so there is a responsibility to mediate the evidence" (participant 4).***

Several participants shared that they translated evidence into language that was meaningful and accessible to particular audiences. They utilized personal and professional skills to understand the evidence, implement it, and discussed it in language that was accessible to each particular audience. Once participants obtained and understood the evidence, they continued to engage with it in order to support practice.

4.4.2 Evidence Supported Practice Change

Participants used evidence to shape and develop their practice over time. They used evidence with intention and understood that it had meaning and value for themselves and others. They recognized its importance and adapted it to meet the needs of their practice even when using evidence was challenging. Participants used evidence in ways that supported their own practice and the practice of others. Three key ideas emerged from participant interviews: participants used evidence with intention, engagement guided their clinical decision making, and they used evidence to support practice change.

4.4.2.1 Using evidence with intention

Participants chose to engage with the evidence. They felt that using evidence was important to support their clients and sought out evidence to support their practice. They used evidence deliberately and chose evidence that best met the needs of their clients. They also understood that evidence frequently needed to be adapted to fit their practice environment. They were aware of best practice and mindful of the way they adapted evidence into their clinical context. One participant explained: ***"so I've kind of had to tailor that down into a quicker expedited [version] but... you can't modify something if you don't do it properly to begin with" (participant 6).*** This participant felt it was important to understand the evidence in order to adapt it to their clinical environment. This required the skills to understand the evidence, to implement the evidence, and to adapt the evidence to meet the needs of the practice environment. This process required the therapist to utilize both clinical and evidence informed practice skills concurrently in order to implement this practice change.

Most participants actively engaged with the evidence and used it with intention. This was demonstrated by their use of active language to describe how they used evidence. Storytelling was also used by most participants, to illustrate specific examples of when they had engaged with evidence. Most provided rich examples, one of which is shared below. Major portions of the quote that describe the specific situation needed to be removed to maintain participant anonymity. One participant shared:

> ***"myself and physio... we were having a lot of issues on the unit [with an intervention]... so what we... did between the two of us ... [was] find some evidence around [the intervention]... we found that [the current interventions] don't do a lot... so we implemented [an alternate technique] ... we went to the***

nurse educator and the manager... and they were...very engaged... we don't automatically [use the previous intervention]... now we have [the new technique]" (participant 2).

This participant used storytelling to share their experiences using evidence to provide the context of how they used evidence to support their practice. Other participants shared similar context-based experiences of sharing evidence in their practice. These examples demonstrated how participants were effective both in implementing evidence into practice and sharing their experiences with implementing evidence.

Not all participants shared examples of using evidence. One individual spoke in generalities about using evidence over many years and interacting with new evidence, but when pressed could not provide any specific examples. It was unclear why this participant engaged with the evidence differently than their colleagues, but other factors such as the environment may have influenced their engagement with evidence. Overall evidence was important to support clinical decisions and client outcomes.

4.4.2.2 Engagement guided clinical decision making

Using evidence had value and meaning to participants and to their practice culture. Participants used evidence to gain knowledge about a clinical intervention or a client population, and they used that knowledge to support their clinical decisions. One participant described how they used evidence in their practice in this way: ***"I also use the evidence to guide me in terms of this is a new practice and how do you implement that to make it both a safe and effective" (participant 10).*** This participant used evidence to

effect change for their practice and support clients in a manner that was safe and could be implemented into their practice environment.

Engaging with evidence was more involved than completing a set of activities. Therapists used the evidence to guide them to make practice changes. They considered many factors such as client safety and engagement in personally meaningful occupations. Participants used the evidence to support improvements in practice.

One participant explained: ***"I've made the recommendation because the evidence and because what we have at our fingertips is what supports that client's care" (participant 6).***This participant felt that using evidence was important to inform their clinical decisions. They considered the evidence and implemented a change in practice in order to support client outcomes. Most participants shared similar experiences of using evidence to support their clinical decision making.

4.4.2.3 Evidence supported practice change

All participants in this study used evidence to support their clinical decisions. They used the evidence to guide their practice and to support their colleagues in implementing practice change.

Evidence had meaning and value for therapists and their clients. It influenced how they practiced and it had an impact on their communities. One participant explained it in this way:

> ***"I think from my perspective that's one of the biggest reasons for evidence based practice is just promoting... OT because sometimes OT's not the most***

concrete of... professions and we kind of do a little bit of everything so... just to make sure I'm providing the best care that I know out there for my patients. You know from the evidence but [also] from going from my colleagues [for] my patients you know not just doing what I've done because that's what I've done and can it be different" (participant 2).

Evidence was important for this participant to validate their clinical findings. Evidence provided support to implement practice change and added credibility to occupational therapy interventions. Many participants felt that evidence was important to show clients and other professions the value and impact of occupational therapy practice.

Some participants used evidence to frame their clinical observations or develop their own practice, while others used evidence to guide or support practice changes of other health professionals in their community. One participant explained: ***"that's what really changed things for me was... going to some conferences and finding out more about things and looking at it from a more global perspective" (participant 5).*** For this participant, using evidence was more involved than what occurred in this participant's day to day practice and engaging with a community of clinicians expanded their perspective. They went on to explain how they in turn encouraged other colleagues to pursue the same learning opportunities as they recognize the influence this can have on the practice of other occupational therapists.

In addition to using existing evidence to support practice, some participants engaged in generating new evidence and created practice tools to support the practice of other clinicians. These participants expressed a sense of responsibility to share their

knowledge with colleagues in order to further occupational therapy knowledge and practice. One participant shared:

> ***"I did a research study that grew out of a clinical question, the results of the study I fed back into my clinical practice... I'm presenting [findings to colleagues]... I will share the results with anyone who wants to hear it" (participant 4).***

This participant felt it was important to share their findings with colleagues and use the evidence to improve their practice. This view was shared by all other participants who generated evidence.

Engaging with evidence in practice was used to support practice change. As participants' skills and knowledge grew they were able to have a greater impact on their own practice and their community. Engaging with evidence was more than simply performing an occupation and required consideration of complex factors that influenced how they utilized evidence as well as its meaning and value for the therapist, their clients, and their practice environment. It impacted all aspects of practice for participants and was not simply complimentary to clinical practice. Engaging in evidence informed practice required participants to utilize a set of skills and was influenced by the environments in which they practice. The impact of these factors will be explored in the themes that follow.

4.5 Person-level factors influenced engagement with evidence

All participants cited personal characteristics that supported their ability to engage in evidence informed practice. They identified a number of personal traits and beliefs that

influenced how they perceived evidence. They also described the skills and abilities that they possessed that facilitated interacting with evidence in their practice. These skills and abilities allowed participants to effectively engage with evidence in order to use it to support their practice. These two key components contributed to how individuals were able to engage with evidence: they had beliefs that supported using evidence, and they had skills that allowed them to use evidence in practice.

4.5.1 Individuals had Beliefs that Support Using Evidence

Participants identified a variety of beliefs about evidence and about using evidence in practice. While many values and beliefs were discussed, three key beliefs were expressed by all participants. These beliefs were: evidence was valuable and using it in practice was valued, ongoing learning was necessary to support practice, and evidence was important to support client outcomes. These core beliefs were evident throughout participant interviews and they influenced how these occupational therapists engaged with evidence in their practice. These beliefs informed engaging in the occupation of evidence informed practice.

4.5.1.1 Evidence was valued

All participants felt that evidence was important and necessary for occupational therapy practice as individuals and as a profession. They believed that using evidence was a key component of being an occupational therapist. One participant stated ***"I feel like evidence based practice is... not only a trend but actually part of the fundamentals of OT now" (participant 4)***. Most participants discussed how evidence supported their clinical observations and influenced their decisions. They felt that having evidence

increased the credibility of their assessments and interventions. This was articulated well by one participant: ***"I think it's desperately important to us as a profession... to be able to back up our actions with some kind of proof" (participant 8)***. All participants indicated that they believed evidence was necessary to support their practice. This belief encouraged participants to consider how they approached using evidence. In addition to valuing evidence, participants expressed that they used evidence in their practice.

Participants utilized many types of evidence to support their practice. Research evidence in particular was cited as a valuable type of evidence to inform practice. They acquired this evidence from a variety of sources including journal articles, systematic reviews, clinical practice guidelines, and books. One participant stated:

> ***"I think it's important for therapists to be aware of research... I think it adds... credentials to us as a profession... I don't think therapists should shy away from research... that's the way healthcare is now... you need to be looking at the research and using it in your practice. You can't just rely on your experience anymore." (participant 3).***

Participants regarded research as the most credible form of evidence. Journal articles were identified as a primary source of this evidence. However not all participants were able to find relevant journal articles in their area of practice. Many participants also relied on clinical practice guidelines as well as new research discussed at professional meetings and conferences as other important and often more accessible sources of evidence.

Ongoing professional education was important to all participants. They utilized a variety of formats for this education: courses, conferences, webinars, journal clubs, occupational therapy department education sessions, grand rounds from occupational therapy and other professions, learning series presented by the facility, and in-services by vendors. They sought educational opportunities that best met their own learning needs and were most relevant to their area of practice. They all identified that continuing professional education was important to develop their clinical knowledge.

Participants valued their own clinical experience and the experience of their colleagues. All participants used their own clinical experience to support their decision making. They also utilized the knowledge of their colleagues, particularly in practice environments where therapists had diverse knowledge and experience. One participant explained it in this way: ***"I also tend to rely on other clinicians around me... I... have an interest and experience in one thing but other people might have an interest and experience in other things" (participant 2).*** Participants from a variety of practice settings shared evidence in this manner and used it to broaden their knowledge base.

Participants also used other forms of evidence in their practice. Many accessed grey literature including facility and health region policies, departmental guidelines, locally generated assessment resources such as forms and tools, and on-line professional and consumer resources to support their practice. Most participants identified that the experiences and perspectives of clients and their families were also very important to informing their practice. They felt that the client provided another form of expertise when making decisions around interventions. One participant stated: ***"in every case the individual in front of me was going to be able to tell you more than research paper***

about how to live their life and experience what they're doing" (participant 8). Most therapists discussed the knowledge and experience of their clients as part of their interventions and used this evidence to inform their practice.

All participants felt that many forms of evidence were valuable to support their practice. Each participant identified multiple sources of evidence and considered several formats for obtaining evidence when making a clinical decision. For example, one participant had many years of clinical experience in their practice area and relied primarily on their clinical experience, the perspectives of their clients, and research knowledge obtained during recent professional education. Another participant with only a few years of experience drew upon research published in journals, evidence they obtained during initial occupational therapy training, and the knowledge of colleagues to confirm their clinical observations. All participants valued multiple sources of evidence and utilized several forms of evidence to support their practice.

4.5.1.2 Ongoing learning supports practice

Participants appreciated that there was always more to learn and that learning was a continuous process. They identified their commitment to learning as being personally meaningful rather than a professional obligation. This commitment to ongoing learning took on many forms. All individuals participated in continuing education opportunities and sought out opportunities to learn. One participant explained: ***"I've... sought out opportunities that would make sure that I [maintain my] skills" (participant 2).*** This participant took ownership of their learning and recognized the importance of maintaining their knowledge and skills. This view was expressed by all participants.

Several participants also indicated that even when there weren't financial resources to help cover the cost of educational opportunities that they used their own money to pay for education because they felt it was so valuable to their practice. This illustrated how committed participants were to their learning.

All participants were highly motivated to seek out new evidence to inform their practice. They sought out opportunities to continue learning and most were willing to commit personal time to engaging with the evidence when they did not have adequate time in their work environment. One participant stated*:*

> ***"I've always been really good or bad; however you want to look at it for using my own time. I look at ... our job like we're professionals and our job doesn't really stop when we leave here at 4 o'clock" (participant 7).***

This participant felt that ongoing learning was important as a professional and that they valued it enough to give up their own personal time.

Most participants made a commitment to acquiring evidence even if it meant using their own time. They chose to use their personal time to attend educational opportunities or read journal articles when there was limited time for these activities at work. This demonstrated how valuable ongoing learning was for most participants. However this was not the case for all participants and one individual felt that they could not spend their personal time engaging with new evidence due to other obligations. It is unclear if this was due to other competing demands on this individual's time or other barriers that were unique to them, as other participants also expressed that they had limited personal time but were able to spend some of that time engaging with new

evidence. All participants felt new learning was valuable and although there were differences in how they sought new learning, they found opportunities to engage with new evidence.

4.5.1.3 Evidence supports client outcomes

Participants sought out evidence to improve the services they provided to clients. They considered the needs of their clients and sought new evidence to ensure clients received occupational therapy services that met the clients' needs and were evidence informed. One participant explained:

> ***"if I'm not doing this for a reason or if there's nothing to inform [my practice] or I'm using certain things inappropriately... what is the impact on the client...I have an accountability to make sure I'm doing this appropriately" (participant 6).***

Participants felt a responsibility to their clients and used evidence to ensure that they provided clients with the most appropriate services. Participants gave examples of seeking evidence to support the needs of individual clients as well as groups of clients with a similar diagnosis or functional limitation.

Participants expressed a core set of beliefs throughout their interviews that influenced their decisions regarding evidence. They were accountable to their clients, they were committed to ongoing learning, and they had a strong belief that evidence was important to the outcomes for their clients. They also felt evidence was important to support the profession of occupational therapy. They demonstrated these beliefs by utilizing skills that allowed them to be effective in using evidence in their practice.

4.5.2 Individuals had Skills that Facilitated Using Evidence in Practice

Participants identified a variety of skills that were necessary in order to use new evidence in their practice. Although the prior literature review suggested that these skills were aspects of the occupation of using evidence, participants spoke about many of these skills as part of who they were as individuals. Given this fact, the skills individuals had were considered as components of the person. These skills were organized into three categories: personal skills that supported the clinician to engage with the evidence, knowledge seeking skills that gave the therapist the ability to seek out and understand the evidence, and practice skills which allowed the therapist to integrate the evidence into their practice. These skills are summarized in Table 1 and are discussed below.

Table 1 Skills of occupational therapists in using evidence

Personal Traits: Supports the individual to engage with the evidence	Knowledge Seeking: Gives the therapist a set of skills to access and understand the evidence	Practice: Allows the therapist to integrate the evidence into their practice or translate it for their clinical environment
Confidence Previous experiences Persistence Further education and training Interest in using evidence Ability to communicate with others about evidence	Skills to obtain, review and appraise evidence Computer skills	Using clinical skills along with evidence Interacting with the evidence Discussing the evidence with others

4.5.2.1 Personal traits

All participants identified one or more personal traits that allowed them to successfully acquire or implement evidence into practice. Some participants identified

specific skills that they possessed due to previous life, education, or work experience that supported them to understand and seek out evidence. Many participants cited intangible skills such as communicating with others or confidence to interact with evidence in a particular practice setting. Other participants cited similar personal traits. One participant described these intangible skills in their practice:

> ***"you know it's persistence, right and [you need] to be able to... believe in what you're advocating for in terms of incorporating that evidence and to be honest... you might have a good idea and I think a lot of the times without that persistence... you get shut down" (participant 1)***.

This quote illustrates how this participant utilized many skills including persistence, effective communication, and advocacy in order to implement new evidence into their practice. These skills allowed the participant to seek out evidence and effectively incorporate it into their practice even when they did not always feel encouraged to do so.

Participants felt having these personal traits allowed them to effectively engage with the evidence. This was described by a number of participants both in how they explained their use of evidence and through examples of how they used evidence in their practice.

4.5.2.2 Knowledge seeking skills

Another important set of skills for participants were knowledge seeking skills. These were the skills to seek out, review, and appraise the evidence. This included completing a literature search, finding articles, and reviewing the evidence they had

found. These skills gave them confidence and allowed them to effectively interact with the evidence. They developed these skills through initial occupational therapy training or further education either at the graduate level or through workplace education. Participants had an interest in using evidence and were inquisitive about seeking out evidence to support their practice. One participant explained it in this way:

> ***"I was always interested in the literature and... how to critically examine a research article so I guess it just sort of happened based on my own interest and the fact that we did have some resources both in OT and [in my practice area], that I could use." (participant 7).***

Most participants discussed their ability to review and evaluate research articles and indicated that they had both the skills and the interest in doing so.

Participants reported that they accessed much of their evidence through electronic sources such as online university libraries, electronic databases, online journals, technical documents, and consumer resources. Electronic resources were cited as the easiest and quickest means to access evidence for most participants. Most participants identified that they regularly received emails with links to electronic journal articles. Many identified that articles were sent regularly by the department research coordinator some participants also belonged to other professional groups that shared electronic links to new research. This hospital had a university affiliation and all participants had access to the university's online library system which included databases and journals and participants cited this as a resource they regularly accessed. All participants identified that they had computer skills to navigate these electronic resources, which facilitated their access to evidence.

Having access to electronic resources and the computer skills to navigate these resources facilitated using evidence as it increased accessibility to the evidence.

4.5.2.3 Practice skills

Participants also identified a number of practice skills that helped them interact with evidence to effectively implement it into their practice. They considered the evidence along with their clinical experience or evaluated new evidence to determine if it was appropriate for their client population or their practice environment. This frequently involved adapting the evidence to their clinical context. One participant explained: ***"I can't just take evidence and apply it; it's not a Band-Aid, right? It has to be translated and shaped before it can be applied clinically." (participant 4).*** This example illustrated how the participant had skills to make the evidence relevant and appropriate for their practice context so that it could be successfully implemented into practice.

Discussing evidence with others was an important skill for participants. They shared evidence with occupational therapy colleagues, clients, and other team members including physiotherapists, nurses, and physicians, managers. Participants were skilled in sharing evidence in a meaningful way with their audience. One participant explained how they adapted the evidence with clients: ***"I guess... when it comes to kind of sharing that information with clients... that's a little different. You're not [going to] say Law et al. in 1998 said this is what I should do" (participant 2).*** Participants expressed how evidence needed to be presented in a way that was applicable to their audience. Sharing information required the skills to understand the evidence, to understand the audience, and to present the information in a way that was relevant to that audience.

Participants possessed skills that allowed them to access evidence, interact with that evidence and integrate it into their practice. These skills were necessary for engaging in the occupation of evidence informed practice. Although there was some variation in participant skills and experience they articulated these skills and most shared examples that demonstrated these skills in action. These skills allowed therapists to interact with the evidence in order to meet their ongoing needs within their practice environment.

Participants shared a set of beliefs about using evidence and possessed skills that allowed them to engage with the evidence. These skills allowed them to interact with the evidence and apply it to their practice context. Therapists required these skills in order to effectively acquire evidence, translate it to their practice environment, and share this evidence with others. Although there was some individual variation, therapists all possessed a set of skills that enabled them to engage with evidence in practice. These skills and beliefs were important aspects of evidence informed occupational therapy practice. While personal aspects were important to occupational engagement it was also necessary to consider the environment where occupations take place. As previously discussed, all occupations occur within an environment and the environment also had an impact on how therapists engaged with evidence in their practice.

4.6 Environments Influenced Engagement with Evidence

Various aspects of the environment influenced how participants engaged with evidence in their practice. The environment was an important component of occupational engagement and had a significant impact on how participants used evidence to support their practice. Participants identified numerous facilitators and challenges within their

practice environment. Some were unique to one aspect of the environment while others influenced all areas of practice. Four distinct sub themes emerged from interviews that influenced engagement with evidence informed practice. The physical environment influenced engagement, the institutional environment influenced engagement, the culture of the practice community valued using evidence, and a supportive social environment facilitated using evidence.

4.6.1 The Physical Environment Influenced Engagement

The physical environment where occupational therapists worked had an impact on how they engaged with evidence. Participants worked in the same facility but were physically located in a number of different offices, each of which had a different physical layout and location in relation to where clients were seen. Some participants had their own offices while others shared office space with other therapists. Some were located adjacent to treatment areas while others were geographically separated from their treatment spaces. Despite this variation, two aspects of the physical environment had a significant impact on engagement for all participants; treatment space and office space.

4.6.1.1 Treatment space

Many participants identified that adequate treatment space was an important facilitator to using evidence in practice. They felt that adequate and appropriate treatment space allowed them to complete evidence informed assessments and interventions with clients. They also valued access to the tools that were necessary to complete their interventions. This ranged from current assessment tools to wheelchairs and seating

products. Most participants identified that up to date and relevant tools facilitated engaging in evidence informed practice and their absence made this more challenging.

4.6.1.2 Office space

Participants identified that office space impacted how they engaged with evidence in practice. Many participants felt that having small or shared offices meant they did not have evidence readily available or had to share resources such as computers with their colleagues. All participants had email and internet access through their work and received evidence through email communications. However participants indicated there were a limited number of computers and the priority was using them for client care activities. Activities related to acquiring or reviewing evidence were a lower priority and there was often not enough time to access the evidence during the work day. Most participants responded to this challenge by sending electronic resources to their personal email accounts and reviewing the information on their own time.

Although shared offices presented some challenges to accessing resources, physical proximity to colleagues within those offices was an important resource for therapists. Having colleagues physically close encouraged clinicians to access the clinical knowledge and experience of their colleagues. One participant stated: ***"you're surrounded by OTs and… in your tiny little offices close quarters and you have those discussions almost daily about... clinical scenarios that come up and things that you've done" (participant 3).*** Shared space encouraged participants to interact with their colleagues and gain knowledge and clinical experience from other therapists. It also

encouraged participants to share new evidence they had obtained. One participant explained:

> ***"it's more... I learned something cool; do you want to hear about it? Or how was that course you went to... and Monday morning was... oh how was that course, what did you learn? Like right away people are asking for that" (participant 2)***.

Having that immediate access to new learning from a colleague provided an opportunity for participants both to learn and share new evidence.

The physical environment presented both facilitators and barriers to engaging with evidence in practice for all participants. Although they cited factors that limited their ability to access evidence, many found ways to adapt how they accessed new evidence within their physical environment. While the physical environment presented challenges, it did not prevent them from engaging with evidence. Participants mentioned other aspects of the environment were more challenging to using evidence, in particular the institutional environment.

4.6.2 The Institutional Environment Influenced Engagement

The institutional environment had a significant impact on how participants engaged with evidence in practice. This study was completed within a single facility that is part of a larger health authority. Both of these aspects of the institutional environment influenced using evidence in practice; however participants were most concerned with the facility where they worked.

Participants spoke about several aspects of the institutional environment within their facility. They discussed several challenges and facilitators within the facility that impacted their ability to engage in evidence informed practice. These included priorities and policies of the institution, resources available within the institution, and interactions with management. These aspects informed how participants were able to engage with evidence within their institutional environment. Participants also identified opportunities and challenges that impacted all areas of practice. These fell into two distinct categories: organizational values and priorities, and support.

4.6.2.1 Organizational values and priorities

Participants reported that they felt their institutional environment valued using evidence in principle but expressed that this was often at odds with other priorities. They identified that opportunities for education and locally developed resources were facilitators to using evidence. However they felt there were several organizational barriers that impacted engaging with evidence in practice. Time, competing organizational priorities, and funds were highlighted by participants as the most significant barriers.

4.6.2.2 Organizational facilitators

Most participants felt that their organization provided educational resources that facilitated using evidence in practice. They had access to a variety of educational opportunities available within their facility. These included education directed towards occupational therapists such as occupational therapy grand rounds and education presented by other programs such as medicine grand rounds or other learning series

hosted by the facility. They also had access to tools and resources developed by their facility and health region. These included clinical practice guidelines, toolkits, local resources or guidelines and forms developed by their health region or occupational therapy resources developed by therapists within their department. Participants felt evidence informed tools developed locally were accessible and provided a context to support their practice. Participants cited a pressure ulcer clinical practice guideline and a seating assessment form as resources they used regularly in their practice. While these resources were facilitators to using evidence, participants also cited a number of challenges that limited their ability to use evidence in practice.

4.6.2.3 Organizational barriers

All participants expressed that the organizational barriers they encountered made it challenging to engage with evidence in practice. Participants felt they did not have adequate time in their workday to be able to meet all their client care needs and to spend time engaging with the evidence. Lack of time was frequently described in relation to organizational priorities. One participant stated: ***"time is definitely a challenge and I think sometimes... justifying the time [is a challenge] because in clinical practice you're pulled in so many directions there's so many expectations" (participant 3).*** Participants felt they had to balance multiple demands on their time in order to make engaging with evidence a priority. All participants described a tension between demands on their time in relation to the organizational priorities. They felt that moving clients through the healthcare system and facilitating hospital discharge was prioritized by the organization. They had to make decisions about how they could use evidence in their practice. One participant explained their experience with this challenge:

"in the healthcare system the key word is flow, like we always want to get people moving... so sometimes... we might know the evidence supports this and it might take me extra time to do this but taking all those other pieces in that this person needs to... get home, they need to do A, B, and C and D that you might, not abandon the evidence but flex the evidence to... meet both of those needs" (participant 2).

Participants had to make choices about the evidence they used and considered the impact on clients in conjunction with the demands of their environment.

All participants described a tension between the steps necessary to use the best available evidence and meeting the demands of their practice environment. Participants were skilled in making choices about how they engaged with the evidence. Many felt they had the skills to make these difficult decisions and articulated the ways that they adapted to the demands imposed by their organization. However this was not always the case. One participant observed that finding time to implement new evidence was sometimes a struggle: ***"I think... the best intentions are for other staff... but... sometimes it's just the push to... deal with direct care with clients that... using evidence ends up... [being] forgotten" (participant 9).*** When there were multiple demands on therapists' time, some forms of evidence appeared to take priority. Clinical experience and the knowledge of colleagues were often prioritized over new evidence in order to meet the demands of the practice environment. While these were valuable forms of evidence for therapists, many expressed frustration that research evidence did not appear to be prioritized by their organization.

Most participants also relied on their institution for financial support to access new evidence informed tools or to attend educational opportunities. Many were able to access funds to attend education but this was challenging when courses were costly or funds were limited. One participant shared their experience:

> "***I think that is where we have some limitations in that... I've applied several times and without really being able to get adequate financing to help me be able to... attend and present at a number of different conferences" (participant 10).***

Access to education was important for all participants and lack of funding limited their ability to acquire new evidence to support their practice. This participant found that access to education and opportunities to share their knowledge with other therapists was limited due to lack of financial supports. Similar views were expressed by other participants.

Participants also expressed that some resources were costly such as new assessment tools which often meant they were unable to access these tools. They were unable to engage in evidence informed practice when they could not access the tools they needed to complete an assessment or intervention. Access to financial resources to generate new evidence was also important to participants. Some were able to access grant money that supported them in generating new evidence. These funds afforded them the time to engage with current evidence and to generate new evidence that informed practice.

All participants felt their ability to use evidence was influenced by priorities of their institution. In some cases the organizational policies or resources influenced how

evidence was used or what kinds of evidence could be acquired. Despite several challenges, participants felt that their organization provided them with some resources that facilitated using evidence in practice. However, accessing these resources alone did not necessarily translate to engaging with evidence. Many participants needed supports to encourage or facilitate using evidence in practice.

4.6.2.4 Support

Participants cited a number of supports within their institutional environment that facilitated using evidence in practice. They identified that managers were a key resource and their support was important and facilitated clinicians' use of evidence. One participant explained the support of their management in this way: ***"they need to be able to... help advocate for the money. They help advocate for the extra [allocation of staffing]" (participant 2)***. This participant expressed how managers were important advocates for resources including the funds for tools and allocated time for clinicians to engage with evidence. Management support was also needed when participants utilized work time to participate in activities related to developing or integrating evidence into practice. One participant explained:

> ***"I really appreciate... the support of my management... I'm a clinician right? So I don't really have that built into my schedule... there was quite a bit of time commitment going in, lots of my own time too but even now [there's a] portion I'm doing on my work time" (participant 5).***

Several participants felt they were supported to redirect their time towards engaging with the evidence and felt that the initiatives they were involved with were well supported by management.

Although most participants felt that they had the support of their manager this was not everyone's experience. One participant felt that they needed explicit permission from their manager to spend time engaging with evidence as they were concerned with how supported it would be otherwise. They relayed their concerns through this example:

> ***"we've done things over the years here like a journal club. Journal club is really valuable but unless it's supported by management, unless people say this is an important thing we have to do and this can take priority it's not going to happen, it's not going to last" (participant 8).***

While other participants from this same practice setting did not express this concern and had different beliefs about how they were supported by management to spend time with new evidence, it is important to acknowledge that some clinicians may need more explicit support from management than others and this influenced how they participated in evidence informed activities. It suggested that some staff required formal permission to engage with evidence in practice.

Participants also felt they needed organizational support to implement new evidence into practice. They required support to share the new evidence and mechanisms to using the evidence in practice. When an innovation was easy to implement and easy to sustain it was more successfully implemented. If the innovation was easily understood by all team members and could be easily incorporated into the work environment it was well

received. In some cases an innovation required the therapist to teach other team members or colleagues about how to carry out the intervention. One participant described their experience with making a practice change in this way:

> ***"I think basically when... that aspect of the practice actually helps the person who is doing it have more effective and less work so to speak...it holds. When there's a little bit more work involved on their part then, then that's when we don't see the same buy in and same maintenance" (participant 10).***

This statement illustrates how the new innovation was successfully implemented because it had a positive impact on both the client outcomes and staff processes. The participant explained that this innovation has been sustained and continued to be supported by management.

Implementation was successful when there was clear evidence to show that a change in practice was necessary. One participant explained that: "***the evidence was pretty clear that...*** **[with the existing innovation]** ***we needed to make these changes" (participant 7).*** In this case the evidence was based on a research project that showed where changes to an existing practice were necessary to improve client outcomes. The participant explained that the change was significant and has been sustained over time. Another participant expressed a similar idea: ***"I share evidence so that I can justify changes in practice" (participant 4).*** Many participants felt that having evidence to support their decision facilitated making a change to their clinical.

Successful implementation of new evidence was a result of the support for the new practice. The support of managers, occupational therapy colleagues, other

interprofessional colleagues including physicians, and clients was important for the innovation to be sustained. Changing practice involved more than just the occupational therapist and many supports were needed to ensure that new evidence was successfully integrated into practice.

Another key support in the institutional environment was the connection to the academic community. This facility had a relationship with a university that provided supports and resources for staff but also highlighted some challenges. As a teaching hospital there were many connections between the organization and the university. One support that was valuable to all study participants was library access. This facility provided all staff with library cards that allowed them to access electronic journals and databases. In addition, the facility was geographically close to the university's Health Sciences library. Access to the library resources was a significant facilitator to using evidence for all participants. Libraries provided an important resource for participants and encouraged them to access research evidence. Librarians were an important support for all participants and assisted them in accessing evidence. When clinicians had limited time available, a support such as a librarian was valuable in assisting them to negotiate through academic resources to access the most relevant research for their practice. One participant explained: ***"for me it was really helpful to link up with the librarian and get connected that way" (participant 5).*** Librarians were identified as a source of support to acquire evidence and navigate academic resources. Despite these facilitators, participants did not all feel the same connection to researchers in the larger academic community. This was not limited to one university but expressed as a challenge with the academic

community in general. This spoke to a division between these two aspects of the community. One participant shared their perspective on this divide:

> ***"I think the university sort of becomes tagged the Ivory Tower...and uh the hospitals end up being the people in the trenches...and so that's a huge problem because then you end up getting the Ivory Tower thinking oh this is a brilliant theoretical plan but the people in the trenches are saying that is never going to fly and this is why. Problem is nobody's actually asked them because the university has gone ahead with their brilliant plan" (participant 9).***

This lack of connection created a division between research that was generated and research that enhanced practice.

Although academic libraries were a resource for participants, many clinicians did not feel they had a strong connection to the academic community generating evidence. Clinically relevant evidence was necessary for successful engagement in evidence informed practice and the disconnect with the academic community was a significant challenge.

4.6.3 The Culture of the Practice Community Valued Using Evidence in Practice

All participants indicated that evidence was valued in their practice community. Evidence was valued by the occupational therapy community and by their interprofessional teams. Participants spoke both directly and indirectly about the influence of culture on how they engaged with evidence. The cultural environment had a significant impact on how all participants engaged with evidence. They discussed how

evidence was viewed by the larger occupational therapy community, and how it was viewed by the practice culture outside of occupational therapy within their facility or program. The beliefs of the community influenced opinions on evidence for all participants. They described both positive and negative beliefs about evidence within their culture. These did not appear to belong exclusively to any one group or a specific part of the cultural environment.

4.6.3.1 Culture of occupational therapy

Several participants spoke about the culture within the occupational therapy community at the facility where they worked. Most felt that the culture in their workplace was encouraging and motivating with regards to using evidence. One participant explained: ***"you have therapists getting excited about evidence so there's a culture of using evidence here. Um, and you also have lots of expertise being a big centre" (participant 3).*** This view was shared by other participants who remarked that the facility is a centre of excellence and as a tertiary care hospital it has programs that do not exist elsewhere in the province. They expressed pride and a sense of responsibility to use evidence within the occupational therapy department. Participants viewed their occupational therapy community within their facility positively and felt it demonstrated a sense of the value of evidence. The initiatives that these clinicians have participated in show a strong commitment to fostering this culture.

Participants felt that evidence informed practice was supported in principle within the larger occupational therapy community in their health region and their province, but expressed frustrations with how this was often implemented. Some participants felt there

was a move from encouraging specialists in occupational therapy to favouring generalists. They felt that this resulted in a loss of opportunity for therapists to develop clinical and research expertise in a specialized area of practice. Some participants had worked in both general and specialized areas and highlighted how they observed that general practice areas had not provided them with the same opportunity to utilize their skills to implement new evidence when their clinical population was diverse. They felt that this limited the expertise that a therapist could develop in a more generalist practice. One participant expressed their frustration:

> ***"the movement toward... generalists we don't specialize in a particular area...I think it's a problem... We're graduating all these masters' students who are supposed to have some research basics but we're not giving them any space or tools clinically to make that happen in the way they learned how to collect and use evidence at school" (participant 4)***.

Therapists expressed a loss of valuable opportunities for engaging with new evidence when specialist practice was not encouraged.

Participants also expressed frustration with how evidence was implemented into practice when new evidence was led by management or based on evidence that was developed outside of their clinical context. They expressed frustration that the perspectives and the experiences of clinicians were not always considered. Some participants described new forms and policies that did not consider their clinical reality and felt that these did not recognize the other influences of their clinical environment. In these instances or when the best evidence was at odds with other aspects of their

environment it led to significant frustration and limited support for implementing the new evidence. One participant explained:

> ***"there's always things you think are right or you think on paper it says this is the best way and then real life gets involved and things like funding and social issues and choices and so yes the evidence says this but in reality [it is a challenge]" (participant 3).***

Implementing new evidence required not only the support of the cultural environment but of many other aspects of the practice environment, particularly the institutional environment as previously discussed.

The views and expectations of the culture of occupational therapy significantly impacted the experiences of using evidence for participants and this had an influence on how they incorporated evidence into their practice. Another participant explained: ***"what you see sometimes in clinical practice is different from what the evidence indicates" (participant 6).*** These examples illustrated a tension between the beliefs of the larger culture of occupational therapy and the experiences of the individuals implementing the evidence. This tension remained unresolved and participants made individual choices in how they implemented these forms of evidence.

Many participants also felt there was a lack of high quality occupational therapy research evidence in their clinical areas. Most felt that there was limited relevant evidence which made evidence informed practice very challenging. One participant stated: ***"occupational therapy as a profession overall we don't have this strong research for every intervention we do to back up what we do" (participant 6).*** Even for those

participants who felt they had access to a larger body of evidence found that the types of clients they worked with were underrepresented in studies.

Limited relevant evidence meant that participants had greater difficulty translating research into their practice. Although the culture of occupational therapy valued evidence, the lack of research to support clinicians was a limitation for participants. Without a strong culture of occupational therapy research, it was difficult for clinicians to access the evidence that enabled them to engage with evidence in practice.

4.6.3.2 Culture of interprofessional communities

The beliefs of the practice community beyond occupational therapy were also important for participants. Many participants felt their interprofessional teams were supportive of using evidence. This varied depending on the practice community. These included an interprofessional journal club, teams where professionals worked together to implement new evidence with clients, and teams that supported participants to take time to engage with new evidence to improve the outcomes of clients. Some participants also worked with teams that had formal supports that facilitated engaging with evidence. These included research assistants and grant money designated for research with their client population. Although there was variation in the ways that the practice community valued evidence, they all encouraged participants to interact with evidence.

The cultural environment had a significant impact on how participants used evidence in their practice. The availability of evidence, the relevance of the evidence and the support of the community to use evidence all impacted and influenced how occupational therapists used evidence. Working within a supportive cultural environment

was valuable for providing encouragement and resources that facilitated using evidence in practice. However when the cultural environment did not consider the needs and challenges of clinicians it led to a lack of resources that challenged clinicians and impacted how they used evidence in practice.

4.6.4 A Supportive Social Environment Facilitated Using Evidence in Practice

Participants identified many aspects of their social environment that influenced how they used evidence in practice. Three distinct components of the social environment were highlighted by participants: the support of colleagues, access to experts, and participation in communities of practice. The social environment impacted day to day practice for all participants and influenced how they used evidence in their practice. One participant explained: ***"if we're going to further our profession, we need to start supporting clinicians who actually know what they're talking about" (participant 9).*** Supporting colleagues with clinical expertise was important for this participant and was expressed by most participants.

4.6.4.1 Support of colleagues

Supportive colleagues influenced how participants used evidence. Colleagues were frequently a source of support for acquiring new evidence. In some cases it meant directly learning new evidence from their colleagues. In some cases colleagues were a support to translate evidence or apply it into practice. In these instances the colleague was sharing process knowledge and research experience with their colleague. Participants experienced both types of knowledge sharing with occupational therapy colleagues and

interprofessional colleagues. One participant explained: ***"there's some... respect there so I think... that's why it's become accepted and certainly they are able to help me to explore the evidence to make more meaning of it" (participant 10).*** Colleagues provided this participant with support to translate evidence into practice. Sharing knowledge and skills was highly valued by participants.

Some participants valued the support of colleagues to take time for new learning. This was particularly important in practice environments where clinicians rely on each other for day to day support or assistance with clinical work. For one participant their experience was:

> ***"I never felt like I couldn't sit down for an hour and read up on something I was unfamiliar with it. I never had... she's just sitting there reading or she's on the computer", right?... people understood that, or you know if you had a question you know... I can't answer that right now but let's talk at the end of the day" (participant 2)***.

This participant felt their colleagues supported them to take time for new learning. The clinician felt personally supported to use evidence and felt their social environment valued new evidence and encouraged them to develop their knowledge. Social environments that supported using evidence also supported therapists to take time with that evidence.

Taking time with new evidence was widely supported when time and resources allowed. When the practice environment experienced high demands such as staff shortages or a directive to discharge more inpatients, the priorities shifted and clinicians

did not feel that their learning opportunities were as high of a priority. One participant explained:

> ***"you know we still have to be OTs and in a high pressure patient flow environment, you know, four of us maybe want to go to the same course but that's just not possible. Um, so... education opportunities get missed because of that piece" (participant 2).***

Therapists needed to balance the needs of the clinical environment and their own learning. They recognized that the social environment could not always accommodate their learning. This did not deter most participants but many chose to use their own personal time for new learning. Participants who felt confident in their social environment were able to make use of opportunities while remaining mindful of the needs of their community.

This was not the experience of all participants and one individual felt that they needed permission from their colleagues to participate in acquiring new evidence. They stated: ***"I think that we work in a very fast paced work setting... and we really notice when people aren't there... so it's almost like I feel I need permission from my co-workers to take... that time" (participant 8).*** This participant did not feel that their social environment was supportive of new learning without explicit permission. This was not the experience of other participants who work in the same practice setting as this participant. While it is unclear why this difference existed, there may have been individual differences between members of the same social environment or the beliefs of the individual may have significantly influenced their perspective of the support of their

social environment. This example highlighted the complexity and individual variation within social environments.

4.6.4.2 Access to experts

Having access to experts was valued by all participants. Most participants felt an expert was someone who had a title that afforded them the time and resources to share their expertise. In addition to named experts, many felt that a clinician who had clinical expertise in a particular topic was also an expert. Participants identified two types of experts in their social environment: clinical experts and process experts. They felt both were important to support engaging with evidence in practice. Participants felt that when they had expertise it was important to share that knowledge with others in order to build capacity. One participant explained it in this way:

> ***"and sometimes too... knowledge not in terms of evidence but just teaching people... I know I have access to a specialist but not everybody has access to a specialist... so as a centre that has that resource we try as much as possible to make even our less knowledgeable therapists experts so they can teach other people when they call and consult and... are looking for information" (participant 1).***

This participant used the resources of an expert but also felt that they should also share evidence with others whenever the opportunity arose. Most participants felt sharing expertise was an important part of evidence informed practice.

Some participants had mentors early in their career that shaped their views about using evidence in practice. These mentors encouraged the use of evidence and taught

them to value using evidence. One participant shared their experience: ***"I had some good mentors in my early years that... I just thought that's the way it should be and you should use evidence and you should do the best you can" (participant 7).*** This illustrated how a mentor was instrumental in teaching them about the importance of evidence and the value of ongoing learning. While not all participants identified a mentor, the sentiment of setting their own standards in practice was expressed by many participants.

In addition to clinical expertise, all participants discussed their interactions with the department's research co-ordinator. Participants felt this role was a support in theory but they had varying degrees of understanding of this role in supporting them to engage with evidence. One participant shared:

> ***"we do have [a research] coordinator... for our occupational therapy department. I'm not completely sure how [the] role translates into... education for us at this point... I know that she works at making sure we're aware of educational opportunities out there but it seems like she's acting more as a clearinghouse for those where those opportunities are rather than facilitating new ones"(participant 8).***

Many participants were uncertain about this role and how it could support them to use evidence. This may be in part due to the fact that this role was only one aspect of this therapist's position.

Participants had many different beliefs about what was involved in this role. Some participants wanted support with acquiring new evidence such as helping them

generate a research question or complete a literature search. Some felt the role was primarily disseminating of educational opportunities that clinicians could access, and other saw this role as someone who supported clinicians to undertake new research projects and provided resources such as how to apply for a research grant or submit an ethics application. Still others felt this role was a resource to connect clinicians with other supports such as librarians or tools that helped formulate a research question but that the role was not that of a research assistant. The lack of clarity about this role may have limited how participants utilized this support. The diversity in needs that participants identified in relation to this role also suggested that clinicians may have had learning needs that remained unmet.

Participants regularly interacted with experts and used them as a source of knowledge and support. However experts were not participants' only source of support. Most participants belonged to communities that supported one another to use evidence. These communities functioned differently depending on the practice context of the therapist but all participants valued participating in these communities.

4.6.4.3 Participation in communities of practice

The participants in this study worked in a variety of practice contexts and the ways in which knowledge was shared differed based on the needs of their specific practice areas. Despite these differences, all participants were part of small communities that supported sharing evidence. These communities of practice fostered learning and engagement with evidence in a way that met the needs of the practice context. Some communities consisted solely of occupational therapists but several participants were part

of interprofessional communities of practice that included other members of their teams. Most participants identified these communities as based in their work environment but a few included clinicians from the broader practice community in their specialized areas of practice. In all cases the purpose of these communities was to build capacity among community members. One participant stated:

> ***"I strongly believe in capacity building, don't feel like we're in competition, or someone knows more than someone else. It's not a hierarchy of who uses evidence, it's a matter of access, so I do think it's part of my role to say I found this and it's relevant in [my practice], who outside of it would want to know about it?" (participant 4).***

Sharing evidence with members of their social environment, particularly those within their work environment, was important to all participants and was a way to improve occupational therapy services for clients.

Communities of practice varied depending on the practice context. Each practice context developed a method of sharing knowledge that fit with their environment. One participant worked in a rehabilitation setting where more than one therapist works with a population of clients. They developed a format for sharing new evidence among the therapists so that all therapists working with that client population could implement the same new evidence into practice. For participants who worked in a busy acute care environment there were clinicians with expertise in a particular topic that became a resource to others for that topic. Having several clinicians with specialized knowledge in a particular topic gave the group access to a greater variety of knowledge in their setting.

Other participants identified communities of practice that extended outside of their immediate work environment. Some participants were one of only a few clinicians with their particular clinical expertise and were connected to a larger clinical community. In some cases it was within the city or province, but in other cases the community included members in other provinces or outside of Canada. These individuals often accessed members of their community in person at conferences or through online communities. These groups shared knowledge about new evidence and experience with implementing new evidence across multiple clinical environments. Therapists who were members of these communities had to seek out their community where others had a community that was already in place. Regardless of the format, all individuals were members of a community.

Although each aspect of the environment was discussed separately, they all influenced each other. The environments where occupational therapist practiced influenced how they accessed, translated, implemented, and shared evidence. All participants shared their experiences of how their environments impacted the occupation of using evidence informed practice.

4.7 Summary

All participants in this study used evidence to support their occupational therapy practice. They not only acquired and interacted with new evidence but they implemented it in order to support their practice and impact client outcomes. They recognized the impact of using evidence on their practice and sought opportunities to share evidence with clients, colleagues, and team members to encourage others to implement evidence

into their own practice. Despite differences in experience, education, and practice, they demonstrated a similar set of skills and abilities that supported using evidence. These were important as they formed the foundation for engaging in evidence informed practice. The environments where therapists practiced also influenced their engagement with evidence. Most participants successfully navigated the challenges in these environments and relied on the supports and facilitators that encouraged them to use evidence. The challenges in the environment and the difficulties that participants experienced in using evidence are also valuable as they provided an opportunity to understand areas for ongoing growth and development.

CHAPTER 5: DISCUSSION

5.1 Introduction

This study sought to answer the research question: how is engagement in evidence informed practice an occupation for therapists? This chapter will address this question along with two other key themes that emerged from the findings; that therapist engagement supported practice change for themselves and their practice community, and the influence of the practice environment on engaging with evidence.

5.2 Using Evidence is an Occupation

This study explored how occupational therapists used evidence to inform their practice. Although they worked in different practice contexts they were similar in how they used evidence to support their practice. They had similar personal beliefs about using evidence and cited examples of how their practice communities valued and supported using evidence. They engaged in similar tasks and activities to acquire, evaluate, and implement new evidence into practice. These activities were separate from their day to day work as occupational therapists but informed their practice. These beliefs and actions are consistent with how occupational therapists define an occupation. Occupations are groups of tasks and activities that a person performs regularly; they occur within an environment and have meaning and value to the individual and the culture. The environments acted as important mediators that influenced how evidence was used and how evidence was valued. Engaging in an occupation reflects the performance of that occupation (Townsend & Polatajko, 2007). All participants engaged

in similar tasks and activities when using evidence in their practice. These beliefs, values, and activities performed together form an occupation for therapists.

Participants completed a number of activities that facilitated acquiring and interacting with evidence. These included acquiring, reviewing, and evaluating evidence from multiple sources including journals, attending continuing education, gaining knowledge from colleagues and clients, and through clinical experience. These skills and abilities are important aspects of acquiring evidence and are well established in the literature (Burke & Gitlin, 2012; Lencucha et.al, 2007; Thomas & Law, 2013). Occupational therapists value multiple sources of evidence to inform their practice and seek them out to support their clinical work (Humphris et al., 2000; Metzler & Metz, 2010). These knowledge seeking skills are important as they provide a foundation that allows therapists to understand the evidence in order to use it in their practice. Participants described these skills more in relation to themselves as individuals. In this way the skills that supported engaging with evidence in practice became an aspect of how they identified themselves as occupational therapists.

When participants engaged with evidence they considered the needs of their clients and themselves, the resources and limitations of their practice environment, and their practice culture. Townsend & Polatajko (2007) express that occupational engagement "captures the broadest perspectives on occupation" (p. 24). When considering this perspective, participants not only performed this occupation, but engaged with the occupation of evidence informed practice.

Participants not only acquired evidence; they interacted with new evidence. This included adapting an innovation to reflect their practice environment, translating the evidence for their clients, sharing the evidence with colleagues to advocate or support using the evidence, and implementing the evidence. This is consistent with other studies that found that an individual must be able to translate and interpret evidence in order to adapt it to their environment (Greenhalgh et al., 2004; Metzler & Metz, 2010). Engaging with evidence was important for all participants and most shared examples of their experiences adapting and implementing evidence into practice. This is significant and identifies key activities that therapists completed in order to utilize evidence in their practice.

It has been well established that new evidence or innovations are implemented by individuals working within an environment (Damschroder et al., 2009; Greenhalgh et al., 2004; Lencucha et al., 2007; Metzler & Metz, 2010). However much of the literature has focused on the facilitators and barriers to implementing evidence. Considering evidence informed practice as an occupation provides a means to discuss how therapists are presently using evidence to support their practice. Understanding how therapists are successfully using evidence can further the dialogue regarding how to continue to develop and support this aspect of occupational therapy practice.

5.3 Engagement Supports Practice Change

An important finding of this study was that participants not only interacted with evidence in their practice but they used it to make practice changes. Most made changes to their individual practice and participated in making practice changes within their

community. Some participants also engaged in generating new research evidence and new resources. The goal of these activities was to further knowledge among occupational therapists and support client outcomes.

Using evidence to support a clinical need is well established in the literature (Greenhalgh et.al, 2004; Rycroft-Malone et al., 2004). Most participants cited examples of using evidence to address a clinical problem for either an individual client or for a group of clients. When the evidence was successful and addressed the clinical issue, participants continued to use the evidence in other clinical situations. Some participants encountered clinical issues that were not addressed in the literature and identified an opportunity to generate new research or participate in creating resources to support other clinicians. These clinicians were knowledgeable in their area of practice and saw generating evidence as a part of occupational therapy practice. They felt it was important to share their findings to support their colleagues. All clinicians who implemented and generated new evidence shared their experience in order to foster practice change.

Participants felt that sharing knowledge with colleagues was a key way to influence practice. They were all members of communities or networks of practitioners who shared knowledge to further practice among members of the group. They exchanged knowledge among peers who shared a similar clinical practice or worked in the same practice setting. All participants were members of occupational therapy communities but some were also members of interprofessional communities working in a shared practice context. The format and structure of each of these communities differed based on the needs of the members and the practice context.

These communities created support networks that encouraged participants to engage with evidence and provided a context in which to share the evidence they acquired. They allowed groups of occupational therapists to find a structure and format that provided support within the environment where they practiced. These differences in style and structure were a reflection of the practice reality of the participants rather than representative of significant differences in the purpose or the function of the community. They also provided an opportunity for participants with varying amounts of knowledge and skill to come together to share evidence. They were flexible and adaptive learning environments. Communities of practice provide an opportunity for shared learning and support to integrate knowledge into practice (Greenhalgh et al., 2004; Lencucha et.al, 2007; Warner & Townsend, 2012). These communities provided an opportunity to share resources and knowledge when clinicians had limited time and access to resources. They also encouraged members to engage with new evidence to support their individual practice.

All participants felt it was important to use evidence to support practice change. This suggests that engaging in evidence informed practice is broader than simply using evidence to inform your own practice. Participants shared evidence so that new practices could be implemented by others in their community. The literature suggests that it is important for evidence to be embedded in a community (Damschroder et al., 2009; Greenhalgh et al., 2004; Lencucha et al., 2007; Metzler & Metz, 2010). Participants not only valued sharing evidence but took steps to share evidence with their colleagues. Practice change is therefore an active process and individual practitioners engaged in activities to implement knowledge and share it with others to support client outcomes. It

is important to understand how therapists use evidence to support practice change in order to encourage this aspect of occupational therapy practice.

5.4 Environments Influence Engagement

The environments where occupational therapists practiced had an influence on their ability to engage in evidence informed practice. This was evidenced by the transactional relationships between aspects of the environment highlighted by the CMOP-E (Townsend & Polatajko, 2007). The social environment was part of the larger cultural environment of both the organization and the profession of occupational therapy. The institutional environment significantly influenced the norms and accepted practices of the organization and these in turn influenced how evidence was perceived and valued in the social and cultural environments. If the institutional environment did not provide adequate resources there were limited supports in the social environment to spend time engaging with the evidence. Beliefs and resources of the occupational therapy community also impacted practice and influenced how the institutional environment responded and implemented changes. All participants felt that their practice environment impacted how they were able to engage with evidence regardless of their individual skills and experiences. There were both facilitators and challenges in each aspect of the physical, social, cultural, and institutional environments and participants felt that each of these environmental aspects influenced each other. This concept is well established in the literature. Translating evidence is dependent on a combination of the practitioner, their clinical population, and their environment (Burke & Gitlin, 2012; Damschroder et al., 2009). In this way, the environment is an important aspect of how evidence is used in practice. It also requires a climate that is open and receptive to implementation of new

evidence (Thomas & Law, 2013). It is important to understand the values and the culture of the environment when considering engaging with evidence as these will influence the experiences of the individual when using evidence in their practice (Burke & Gitlin, 2012). While all participants felt that their environments influenced how effectively they engaged with evidence in practice, there were three key themes that emerged from participant interviews: organizational priorities impacted how therapists engaged with evidence, the environment provides opportunities for sharing knowledge to encourage using evidence within the community of occupational therapy, and support from key aspects of the environment is necessary to engage with evidence.

All participants felt that evidence was supported in theory but not always in practice. Participants had access to resources such as practice guidelines, facility-based educational opportunities, university library resources and internet access. However participants frequently cited being limited in how often they could access these resources due to other obligations. Other organizational priorities, in particular patient flow and hospital discharges were prioritized over activities including engaging in evidence informed practice. They did not always feel they had the time to spend with the evidence or to implement best evidence. These challenges are well established in the literature. Humphris et al. (2000) found participants in their study identified work pressures and lack of time limited use of evidence in practice. Other studies have also identified that lack of resources including time are a barrier to implementing evidence into practice (Bennett et al., 2016; Damschroder et al., 2009; Greenhalgh et al., 2004; Rycroft-Malone et al., 2004). Many participants felt they had to make choices about what evidence to use and at times chose clinical experience over research. They attributed this to lack of time

to acquire and implement research evidence. In their study, Bennett et al. (2016) also found that occupational therapists prioritized clinical knowledge above research when time resources were limited. Participants felt a disconnect between best practice and their clinical reality. They identified research and organizational resources such as clinical practice guidelines, practice tools and forms that were evidence informed, but they did not always translate well into their practice environment. These findings are consistent with the literature which suggests that it is important that evidence fits with organizational needs, or it needs to be adapted to fit the organization's needs, to be successfully implemented into practice (Damschroder et al., 2009; Greenhalgh et al., 2004; Rycroft-Malone et al., 2004). When evidence was challenging to implement into the practice context, it was less likely to be utilized by participants. The organizational culture therefore has a significant impact on how evidence is implemented into practice. It is important that organizations support implementation of evidence not only in theory but in practice.

All participants felt that the environment where they practiced provided opportunities for sharing knowledge to encourage engaging in evidence informed practice. Several participants identified mentors or knowledgeable colleagues who supported them to use evidence. In some cases the participants themselves were the experts and they felt a responsibility to encourage and support their colleagues to use evidence. Although participants described their mentors and experts in terms of their clinical expertise, these individuals may also be skilled in supporting others to implement new evidence. These findings are consistent with research that suggests that expert colleagues are important facilitators for successful implementation of new evidence.

Experts can act as facilitators (Kitson et al., 2008; Greenhalgh et al., 2004), or act as a bridge to connect practitioners to managers or knowledge generators who can help with implementation (Bennett et al., 2016; Cramm et al., 2013; Hitch, Rowan & Nicola-Richmond, 2014; Kitson & Harvey, 2016). Expertise and skills are also necessary to support using evidence in practice for a community of therapists (Thomas & Law, 2013; Virani et.al, 2009). While study participants spoke positively of their individual skills in using evidence in practice some also felt there were areas where they would still benefit from support or learning. It is important that all occupational therapists have education and skills to support using evidence in their practice (Thomas & Law, 2013). This suggests that the institutional environment needs to consider providing opportunities for therapists to develop their skills so that all members of the community have the opportunity to develop their knowledge. There are several models of knowledge sharing that facilitates using evidence in practice; these models could provide ideas on how to support the implementation of evidence in larger environmental contexts. Kitson & Harvey (2016) suggest facilitation can support teams to implement new evidence into practice. The facilitator works with the team to use new knowledge to improve practice. However this model does not address gaps between decision makers, clinicians, and researchers. Knowledge brokers understand the clinical and cultural challenges and are supports to empower clinicians (Hitch et al., 2014; Hoens & Li, 2014). However these models all rely on an individual who can facilitate knowledge sharing among clinicians. All study participants identified that they had a research coordinator but were unclear about how this role supported their learning needs. Many participants cited a lack of clarity about this role and this limited how they engaged with this resource. This presents

an opportunity to clarify existing roles and consider implementation of new roles to develop expertise to support clinicians to use evidence to inform practice.

Organizational support was identified as being necessary for participants to engage with evidence. Most participants felt they were supported by management to engage with evidence, but this was not the case for all participants. One individual wanted explicit permission from management and their practice community to spend time with evidence. If all occupational therapists are to successfully engage with evidence in practice they must have organizational support that meets the diverse needs of individuals. There are several aspects of organizational support that are important for facilitating organizational change. It is important to have an organizational culture that values evidence and supports change in practice (Bennett et.al, 2016; Mallion & Brooke, 2016; Rycroft-Malone et.al, 2004; Weiner, 2009). This includes all members of the organization from clinicians to hospital executives. Organizations where members value and are engaged in practice change are more successful and committed to changes in practice (Weiner, 2009). Supportive leadership is also important for culture change. A supportive leader has access to resources, provides encouragement and creates practices that become embedded into the institutional environment (Bennet et.al, 2016; Greenhalgh et.al, 2004; Thomas & Law, 2013; Virani, Lemieux-Charles, Davis & Berta, 2009; Weiner, 2009). Creating a practice environment that encourages occupational therapists to engage in evidence informed practice benefits the client, the therapist, and the organization. When participants felt supported they were able to make practice changes that influenced the outcomes for their clients, supported the learning of their colleagues,

and influenced practice change for their community. In order to support this it is important that the environment continues to evolve to meet the needs of the community.

5.5 Summary

All participants in this study engaged in evidence informed occupational therapy practice. They shared a common set of beliefs about using evidence and skills that enabled them to engage in this occupation. They engaged in evidence informed practice to meet the needs of their clients and to support practice change for themselves, their colleagues, and their communities. The environments where therapists in this study practiced presented both facilitators and challenges to using evidence in practice. They also provide an opportunity to consider what supports and resources are necessary to encourage all occupational therapists to engage in evidence informed practice.

5.6 Limitations

This was a small study completed at one facility. One potential limitation is that it may be difficult to generalize findings to the larger community. Participants in this setting may not be representative of individuals in other practice settings. Additionally one area of practice was not represented. Although participants in this practice area are similar to those who were in the study it is difficult to say with certainty that their views were represented. These limitations were addressed by providing details about the study location and the sample. This allows readers to assess if the findings would be relevant to their practice setting. A more significant limitation of this study is that participants self-selected and therefore the views of occupational therapists who did not participate in the

study are not represented. An area of future study would be to expand the focus of this study to include the perspectives of a larger group of therapists across multiple practice contexts.

CHAPTER 6: CONCLUSIONS

6.1 Introduction

Participants in this study were engaged in the occupation of evidence informed occupational therapy practice. Not only did they interact with the evidence and use it to support their own practice, many participants also engaged with evidence to support practice change for their colleagues. Changes varied in scope from changes that impacted a small group of clients within a particular practice setting to generating new evidence that has been shared with the larger occupational therapy community in this facility. These skills are not only necessary for practice (ACOTRO, 2011; CAOT, 2012) but they demonstrate the commitment that these occupational therapists make to supporting practice for themselves and their colleagues. There were both facilitators and challenges in their environment which influenced how they implemented new evidence. These facilitators and challenges provide an opportunity to consider the implications for clinical practice, education, and areas for future research.

6.2 Implications for Clinical Practice

Conceptualizing evidence informed practice as an occupation provides a framework to discuss the tasks and activities that are involved in participating in this occupation and the supports and resources that therapists require to be successful. Participants shared many examples of successful engagement with evidence in practice which positively influenced their clients' outcomes and encouraged knowledge exchange among colleagues. It is important to continue to build on these successes and encourage therapists who implement evidence into their practice.

Participants identified a number of resources in their environment which facilitated engaging with evidence. These include access to a university library, practice guidelines and resources developed by their health region, and existing supports. These resources are important facilitators to using evidence in practice. It is important that occupational therapists have access to both the resources that facilitate accessing and using evidence, but also resources that encourage and support therapists to engage in the occupation of evidence informed occupational therapy practice. These include opportunities, support and guidance to seek out and interact with new evidence (Greenhalgh et al., 2004). Providing therapists with the opportunity to choose evidence that is meaningful to their practice and encouraging them to interact with that evidence in order to understand the evidence and adapt it to their practice is important as it encourages therapists to consider the process of engaging with evidence as valuable both personally and professionally. Participants in this study were provided with many of these opportunities and this was an important aspect of why engaging with evidence was not simply a set of activities, but an occupation that had value and meaning for therapists. These supports are key to facilitating engagement with evidence informed practice.

Most participants felt supported by their peers and their manager to use evidence in their practice. These supports enabled therapists to engage with evidence. Creating opportunities for collaboration between colleagues and across interprofessional teams are important resources to support engagement (Greenhalgh et al., 2004). However participants felt less supported by their larger organization to spend time engaging with evidence due to other organizational priorities. This study identified two areas of support

that can facilitate engaging in evidence informed practice: increased organizational support, and strengthening existing communities or practice.

One way to support using evidence in practice is to implement change at the organizational level. It is important for therapists to have a clear understanding of how practice change will be implemented in practice (Weiner, 2009) and that there is a plan to sustain change over time by embedding it into the organization (Virani et al., 2009). It is also important to have strong leadership to support occupational therapists to implement using evidence in their practice (Bennett et al., 2016; Greenhalgh et al., 2004; Virani et al., 2009). A clear, well articulated vision with strong supports and actions would provide an environment that fosters engaging with evidence in practice.

Participants were all members of communities of practice. These existing communities provided peer support to engage with evidence in practice. When participants had limited time to engage with new evidence they relied on the expertise of their colleagues. Supporting therapists with clinical expertise or encouraging clinicians to develop expertise can help spread new knowledge among a community of therapists (Damschroder et al., 2009; Greenhalgh et al., 2004). This strategy was implemented on a small scale by most participants' practice areas in their work environment and would benefit from further exploration and support. This strategy may be particularly beneficial for therapists working in a practice environment with many competing demands for their time. By collaborating to share evidence, communities of therapist would share resources to acquire and implement new knowledge.

These communities could also provide opportunities to connect with other stakeholders within their organization who can facilitate utilizing evidence in practice such as managers, researchers, academics, or policy makers. While it may not be feasible for these stakeholders to directly participate in these communities, it would be beneficial to consider exploring the development of a role such as a facilitator or knowledge broker who can act as a link between multiple stakeholders. These methods of facilitation could provide opportunities to develop the roles and resources that best meet the needs in their clinical practice context (Greenhalgh et al., 2004; Hitch et al., 2014; Kitson & Harvey, 20016). Strengthening existing communities of practice would provide opportunities for support from peers, opportunities to engage with other stakeholders, and encourage sharing of new evidence within a busy practice environment.

6.3 Education

Evidence informed practice is an important competency for Canadian occupational therapy practice as established with the Joint Position Statement on Evidence-based Occupational Therapy (CAOT, 1999). It is also a practice expectation as outlined by ACOTRO, the organization that oversees Canadian occupational therapy regulatory bodies (ACOTRO, 2011). It is therefore important that occupational therapists are equipped with the necessary skills to utilize evidence in their practice. Participants identified a number of skills and abilities that facilitated engaging with evidence informed practice. Although all participants felt they were able to engage with evidence, many felt they would benefit from further skill development. This suggests that there is an opportunity for ongoing skill development. Providing learning opportunities for

therapists to acquire or develop these skills would support all therapists within the practice community to actively engage with evidence.

Another important facilitator for participants was their research coordinator. All participants discussed the role of the research coordinator and felt it was valuable, but there was uncertainty among participants regarding how this role supported engaging with evidence informed practice. This presents an opportunity for the organization to consider how this role can support evidence informed practice. Better definition of this role would lead to a greater understanding of what supports are available from this position. If therapists have learning needs that are not met by this role, this presents an opportunity to identify areas for possibly role development to meet the needs of therapists. If supporting evidence informed practice is not within the scope of this position, this presents an opportunity to create a new role to support therapists.

6.4 Future Research

While this study found that engaging in evidence informed practice was an occupation for therapists, this is an area of practice that requires further study. This study was completed in a single facility and while it may in some ways appear to be a limitation, it may also be a strength. This study was conducted in a tertiary care hospital with access to many resources. This setting was in many ways exemplar as the environment enabled participants to interact with evidence and may have encouraged engagement with evidence in ways that may not be possible in other practice settings. Participants in this study may also have been unique in their ability to utilize their skills and resources to engage with evidence. These factors may have contributed to enabling

participants to engage in evidence informed practice in ways that facilitated it becoming an occupation for these therapists. It would be beneficial to explore the experiences of therapists working in other practice environments who may experience different facilitators and challenges to using evidence in practice, and whether other practice environments enabled engaging with evidence in ways that encouraged it to develop into an occupation for therapists.

It would also be beneficial to consider a broader Canadian occupational therapy perspective on using evidence in practice from a variety of stakeholders including clinicians, educators, managers, regulatory bodies, and professional organizations. Further understanding of this occupation and the facilitators and challenges associated with using evidence in practice would be valuable in order to develop resources for therapists, provide opportunities for education, and support ongoing occupational therapy research.

6.5 Summary

Engaging in evidence informed occupational therapy practice is an important and valuable occupation for therapists. Many participants in this study were involved in a variety of projects that supported improved client outcomes. While it is important to continue to make practice changes to encourage engagement it is equally important to recognize and celebrate the changes that have positively impacted clients. There is opportunity for learning from the experiences of colleagues and it would be valuable to create opportunities to share these new initiatives among all occupational therapists working in this facility and with the larger practice community. Regardless of their size

or scope, each of the projects contributed to making practice changes; they need to be recognized and shared.

This study presented an opportunity to discuss how therapists use evidence to support their practice. It established that using evidence to support practice is not just a component of clinical practice, but rather it forms its own occupation and has meaning and value for occupational therapists. Understanding that it is an occupation allows for further exploration of how it can be encouraged, supported, and celebrated in practice.

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Appendix A: Invitation to participate email

Subject: Invitation to participate in a research study on the use of evidence in occupational therapy practice.

Body of email:

You are invited to participate in a research study. The study will be led by Danielle Harling, Occupational Therapist at Health Sciences Centre as a requirement of her Master of Science (Post-professional- Occupational Therapy) degree and is being completed with the support of the occupational therapy department.

The purpose of this qualitative study is to understand how occupational therapists use evidence in their practice. In occupational therapy, evidence includes what we know from research, theory, as well as clinical experience and clinical reasoning as well as what we have learned from our clients and their families.

Any occupational therapist currently working at Health Sciences is invited to participate.

Your participation will consist of a 30-60 minute in-person interview which will be completed on-site but outside of work hours. You will also be asked to review a summary of your interview after it has been transcribed to review it for accuracy.

While there are no direct benefits to participating in this research, your input would be helpful in better understanding how occupational therapists at Health Sciences Centre use evidence in their practice. The information learned during this study will be shared with you and with the occupational therapy discipline director. It may also be shared with other occupational therapists at the site in the future, but the information you share will unidentifiable in any reports.

All participation is voluntary and has no impact on your current work status. Participants can withdraw from the study at any time.

If you are interested in participating, please contact Danielle Harling at (204)787-3800 or by email at dharling@hsc.mb.ca to further discuss the study. Please note that not everyone who is eligible will be able to be included in this study.

Thank you

Appendix B: Permission to Recruit from Occupational Therapy Department Director

Health Sciences Centre
Winnipeg

Kristal Laminman
Director Occupational Therapy, Therapeutic Recreation and Orthotics

March 27, 2015

Re: Danielle Harling's Thesis Research

As Danielle Harling's Manager and Director, I am writing this letter to outline the support I have pledged for Danielle's thesis research project.

Danielle has communicated the scope and purpose of her research and has answered all necessary questions from my perspective regarding the study she will be conducting and the assistance she is requesting from our Department.

I am pleased to provide Danielle with access to our Department space and any shared equipment she requires to complete her work. I would also be supportive of and would assist Danielle where needed in communicating and distributing participant recruitment materials.

I look forward to the next steps in Danielle's study.

If you have any questions, I can be reached at klaminman@hsc.mb.ca or via phone at 204-787-2232.

Kristal Laminman

820 Sherbrook Street (RR172), Winnipeg, Manitoba R3A 1R9 / **Phone 204-787-2232** / Fax 204-787-1101 / klaminman@hsc.mb.ca

Appendix C: Demographic Information/Screening Tool

"Thank you for your interest in participating in the research study "Engaging in evidence-informed occupational therapy practice". This study involves participating in a 30-60 minute semi-structured interview. Are you still interested in participating?" (if yes, proceed with questions below, if no "thank you for your time, goodbye").

The session will last for between 30-60 minutes and will occur outside of work hours. The interview will be audio-taped. Audio-taping the interview is an important way to ensure that the thoughts and opinions you share are accurately captured and reflected in the data analysis. You will also be asked to review a summary document of your interview at a later time which will take about 15-30 minutes to complete. Are you able to commit to participating in the study for this length of time? (if yes, proceed with demographic questions)

I would like to ask you a few demographic questions .These include questions about your area of practice and your clinical role. The information you provide will only be used to identify if you are a good fit for the study. Is this a good time? (if yes, continue with questions. If no, arrange a time to call back). You can refuse to answer any of these questions and I will only keep the information if you participate in study. If you chose not to participate in the study the information you shared with me today will be securely destroyed.

Do you have any questions about this or anything else I have discussed so far? (Answer any questions they may have)

Name:

What area of practice do you currently work in?

How many years have you worked as an occupational therapist?

What is your primary role in your position (if they are unsure, ask if they are a clinician, advanced practice, researcher, manager, or other)?

Thank you for taking the time to answer these questions. Would you like to schedule your interview time now or would you prefer if I called you back at a later time? (If yes, proceed to schedule interview, if not, arrange a time to call back).

If enough numbers for a component of the recruitment matrix have already been selected, inform the participant "At this time I am not looking for additional participants in your area of practice. If anything changes, may I call you back to see if you are interested in participating at a later time? (Keep their responses if yes, discard this tool confidentially if no) I will be in touch with you the week before the interview to remind you and I will send you a copy of the consent form by email.

Participant is scheduled for an interview: Yes/No

Participant Identifier: _____

Date and time of interview: _____

Appendix D: Recruitment Matrix

	Acute Care	Rehabilitation	Mental Health	Musculoskeletal (Hand therapy, Burns, return to work, etc)	Other
0-10 years of practice					
11+ years of practice					

Include the following information next to each participant ID:

Primary Type of Practice

(C) = clinician (AP) = advanced practice (M) = management (O) = other

Client Population

(A) = adults (P) = pediatrics

Appendix E: Consent Form

Title: Engaging in evidence-informed occupational therapy practice

Introduction:

We invite you to take part in a research study being conducted by Danielle Harling who is a graduate student at Dalhousie University, as part of her course of study. Your participation in this study is voluntary and you may withdraw from the study at any time. Your participation in this study will have no impact upon your employment or your ability to take part in any future continuing education that may be developed as a result of this study. The study is described below. This description tells you about the risks, inconvenience, or discomfort you might experience. Participating in the study might not benefit you, but we might learn things that will benefit others. You should discuss any questions you have about this study with the researcher or her supervisor.

Contact Information:

Researcher: Danielle Harling

Occupational Therapy Department

Health Sciences Centre

GE 546-820 Sherbrook St.

Supervisor: Grace Warner, Ph.D.

Associate Professor, School of Occupational Therapy, Dalhousie University

Forrest Building, Room #161 University Ave.

Winnipeg, MB R3A 1R9
Phone: (204) 787-3800
Email:dharling@hsc.mb.ca

Halifax, Nova Scotia B3J 3T1
Phone: (902) 494-2559
Email: grace.warner@dal.ca

Purpose of the Study

The purpose of this study is to understand how occupational therapists use evidence in their practice. Occupational therapists use a variety of evidence in their practice which can include research, theory, clinical experience and clinical reasoning, and the knowledge and experiences of clients and their families.

Study Design

To understand your experiences using evidence in your practice, you will be asked to participate in an individual interview in person with the researcher. The interview will take approximately 30-60 minutes to complete. After your interview you will be sent a summary of your interview including any potential quotes that may be used in written publications of this study. You will also have the option to receive a copy of the full verbatim transcript of your interview. You will be asked to review the summary document (and transcript if requested) to make sure that it accurately represents the information you shared in the interview.

Who Can Participate in the Study?

Occupational therapists who work at Health Sciences who are interested in discussing how they use evidence in their practice are invited to participate.

Who will be Conducting the Research

Danielle Harling, an occupational therapist working in acute care at Health Sciences Centre, and a student at Dalhousie University, will lead the research project. She will be supported by her thesis supervisor Dr. Grace Warner who is a faculty member at Dalhousie University.

What you will be asked to do

You will be asked to participate in an interview which will take approximately 30-60 minutes to complete. This will take place in the Occupational Therapy Department conference room at Health Sciences Centre outside of work hours. If you do not feel comfortable meeting in this location for any reason, you can select another location. The session will be audio recorded and the interviewer will make hand written notes during the session. A few weeks after your interview you will be sent a written summary of your interview to review. The transcript will be sent at the same time if you have chosen that option.

The written summary will include a summary of the content of your interview, observations and impressions from the researcher as well as any possible quotes that may be used in any final reports. A verbatim transcript is the word for word transcription of everything you and the researcher said as well as additional observations such as body language during the interview. You will be asked to confirm whether the summary provided to you accurately represents your responses during the interview and to identify if there are any quotes you do not wish to be included in any final report generated from this study. You will be asked to review the summary within 3 weeks of receiving the copy but it is anticipated that reviewing the document will take between 15-30 minutes to

complete. If the researcher does not receive any response from you in three weeks it will be assumed that you agree the material accurately represents your responses.

Possible Risks and Discomforts

You might find it uncomfortable to share your experiences or challenges using evidence with another occupational therapist who is also a colleague. If at any time you feel uncomfortable or upset you may ask to have the interview stopped or choose not to answer any questions. You may also choose to end the interview and withdraw your participation from the study. There are no consequences to withdrawing from the study and your decision to do so will remain anonymous. During the interview you do not have to share any personal information or discuss anything that you do not want to. Direct quotes may be used in written reports generated from this research with your permission; however you will not be identified by name and there will be no identifying details in any documents. Any anticipated quotes will be included in the summary for you to review and you may choose to have any quotes removed at that time.

Possible Benefits

There is no personal benefit to you for participating in this study but indirectly there is benefit to occupational therapy as a profession. This information obtained during this study may be used to develop continuing education or other learning strategies. The final report will also be shared with the Occupation Therapy Department leadership.

Compensation/Reimbursement

You are thanked for you time and knowledge, however we are unable to offer compensation for participating in this study, or cover any expenses incurred. Participation will take place outside of work hours.

Confidentiality & Anonymity

Your confidentiality and anonymity are of great importance. Although the interviews will be tape recorded with your permission, only the researchers will have access to these recordings and your identifying information. The information collected will be kept in a secure location for 5 years from the date of any reports or publications. The University of Manitoba Health Research Ethics Board may review research records for quality assurance purposes.

Your name will not be used in any reports or publications as part of this research. An identification code will be assigned to you when your participation in the study is confirmed. Because this is a small study there is a risk that you could be identified based on some of the data you have shared. The researcher will make every effort to minimize the possibility that you will be identifiable from the information you share by reporting quotes without personal details such as your area of practice or presenting generalized findings if a quote will identify you. You will also be sent a summary of your interview so you can review what quotes might be used in the final study report as well as the researcher's thesis. The final study report will be made available to occupational therapy leadership and may be shared with other members of the Health Sciences Centre community. The researcher's thesis will also be a publically available document and the information may be used as part of other future presentations or publications. If you are

in any way concerned about any information being included in this report please inform the researcher of the information you wish to have removed. You will have the opportunity to ask to have any of your own quotes omitted from written reports when you review the summary of your interview. The researcher's completed thesis and any other publications will be presented without any personal identifying information. You may choose to receive a copy of the study's final report or an electronic copy of the researcher's thesis.

The audio recording of the interview and the notes taken during the interview will be kept in a locked drawer in the researcher's office after the interview then will be removed to the researcher's home. These documents will be destroyed once the information is typed. The typed information will be stored on the researcher's password-protected profile on her computer in her home. Your name and any other personal identification will not be stored with these files. Your name and the alphanumeric code you were assigned will be kept in a separate and secure location in a locked filing case in the researcher's home. All data collected during the study will be stored securely for five years after the study is completed. At that time all electronic data will be wiped and all paper records will be shredded and securely destroyed.

The research is examining the barriers and facilitators to using evidence, and it is expected that you will discuss challenges to using evidence in practice. However, if your interview discloses a situation of unsafe or unethical practice of not using evidence to guide decision making as indicated by the College of Occupational Therapists of Manitoba Code of Ethics (Section A) or the Essential Competencies of Practice (Unit 6), the researcher is legally obligated to disclose information to the College of Occupational

Therapists of Manitoba (COTM) and your supervisor. The research project uses a broad definition of evidence (e.g. understanding of the client, theoretical knowledge, quality research evidence, and therapist clinical reasoning) so it is expected that the duty to disclose information will be rare. Examples of situations that may trigger this are if you identified you did not use any evidence to guide your practice, or you continued to use an intervention where there was strong evidence indicating that it was ineffective or potentially harmful. Under these circumstances COTM may request access to any materials collected during the interview including the audio recording and any accompanying written transcriptions as well as any field notes completed by the researcher during the interview. If a concern arises you will be informed.

If as a result of completing this interview you feel that you need or want supports to help you develop your skills to use evidence in practice, with your permission I will provide you with a list of supports or resource persons might be helpful to you.

Questions

If at any time you have questions about the any part of the study, you may contact the researcher directly.

Withdrawing from the Study

If at any time you wish to no longer participate in the study you are free to withdraw. The information you have contributed to the study up to that point will still be used unless you ask for it not to be used. If you wish to have your data removed from the study and destroyed, contact the researcher directly within the first 3 months after providing your feedback on the summary of the interview. After that time the researcher will be unable

to separate your data from the analysis. There will be no impact on your ability to participate in any continuing education that is developed as a result of the study findings. Once the study is completed and any findings are published, you will not be able to withdraw from the study.

Termination

If for any reason the study is terminated by the researcher, you will be informed of this.

Problems or Concerns

If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Catherine Connors, Director of Dalhousie University's Office of Human Research Ethics Administration for assistance at (902) 494-1462, ethics@dal.ca. The University of Manitoba Health Research Ethics Board may be contacted for concerns about the study at (204) 789-3389.

I have read the consent form for this study. Any questions up to this point have been answered by the researcher and I agree to participate in this study. I know that I am free to withdraw from the study at any time. I have been given a copy of this signed consent form.

Consent Form Signature Page

_____ I consent to participating in an interview

_____ In addition to the interview summary I would like to receive the verbatim transcript of my interview

_____ I consent to the researcher including anonymous quotes from my interview in publications or presentations of this study. These quotes will be provided to me in the summary of my interview. If I identify any quotes I want omitted I will notify the researcher.

_____ _____

Participant's Signature Date

_____ _____

Researcher's Signature Date

Information options

_____I would like a copy of the final report of the study

_____I would like an electronic copy of the researcher's thesis when it is completed

Contact information: _____

Method of communication

Do you want all study related written documents to be sent to you in the same manner/location?

Yes/No

If you wish to have some sent by mail and others sent by email please identify below:

Documents I would like to receive by email:_____

Documents I would like to receive by mail:

_____

Appendix F: Interview Guide

As you know, the purpose of this study is to understand how occupational therapists use evidence in their practice. Before we begin I want to remind you that participating in this study is voluntary and you can choose to withdraw from the study at any time. This interview will be audio taped and the data will be kept in a secure location and destroyed at the end of the study. Before we begin do you have any questions about the research project?

To start I will give you a working definition of evidence informed practice. Evidence informed practice involves using evidence to guide clinical decision making. Evidence informed practice, is the process of asking a clinically relevant question, obtaining and appraising the available evidence, applying the evidence to the clinical situation, and evaluating its effectiveness (Law & MacDermid, 2008). Evidence in occupational therapy practice can include research, things you have learned during courses and workshops, clinical experience, and the knowledge and experience you gain from clients and their families.

Beliefs about evidence

1. I would like to start by getting a better understanding of your experiences using evidence in practice. Can you tell me about what kinds of evidence you use in your current practice?
2. What are your thoughts and feelings about using evidence in practice?
    a. Is evidence important to you?

Using evidence in practice

I would like to know more about how you use evidence in your practice. These next questions are about using evidence.

3. How do you typically acquire new evidence in your practice?
    a. What challenges do you have in using evidence in your practice?
    b. What facilitators help you use evidence in your practice?
4. What skills do you feel you personally have that help you to use evidence in your practice?
    a. How/when did you acquire these skills?
    b. If you don't feel that you have the skills you need, can you tell me about what you want/need and what has limited your ability to acquire them?
5. How do you share evidence with your colleagues/clients/supervisors?

Practice environments

The environments we work in can impact how we use evidence in practice. I want to ask you some questions about how various aspects of your work environment may impact how you use evidence in practice.

6. Is using evidence in practice supported in your work environment?
    a. What kinds of evidence are you supported to use in your practice?
    b. How does using evidence fit into the practice culture of your environment?
        i. How does being an evidence informed practitioner fit into the work environment? (want to know if there is a need to balance discharge demands and using evidence)

7. Are there tools or resources in your work environment that facilitate using evidence in your practice? Tools can include anything from physical tools such as assessments, treatment tools, physical space, computer access, library resources, and resources may include support from experts, ability to access support staff, time, or any other resources or tools you feel allow you to use evidence in your practice.
    a. If cues/prompts are needed, consider time, computer access, access to library resources, support from experts
8. Do you feel supported to implement evidence into your current practice?
    a. In what ways do you feel supported?
    b. Whose support is important to implement evidence in your practice?
9. Can you tell me about a time when you implemented evidence into your practice?
    a. What steps did you take?
    b. Was it supported by your colleagues/clients/manager?
    c. Did others change their practice after you incorporated this new evidence?
    d. Has the change been sustained?
    e. If participant doesn't have an example, as about:
        i. Was there evidence you would have liked to implement
        ii. What prevented you from implementing it or how far were you able to go in trying to implement it
        iii. What do you feel was the reason the evidence could not be implemented or alternatively what do you feel would have been

needed to help you implement the new evidence and what supports would you have required and from whom?

10. Is there anything else you would like me to know?
11. For participants who either self-identify as having an expert role OR a participant who others have identified as having an expert role, consider adding the following questions:
    a. For you, how is the role of an expert identified (ie by experience, job description, further education, etc)?
    b. Are there additional expectations to use evidence in your practice?
    c. Who has identified those expectations (ie self, colleagues, manager)
    d. Do you feel additional pressure or responsibility to use or to share evidence with having the role of an expert?
        i. Is there an expectation of formal or informal sharing of evidence that is different for you as an expert?
    e. Do you see the way you use evidence as being different from that of other colleagues? (this could be related to job expectations or personal expectations)

Supplemental Questions

- If acute care therapist- ask if they used the initial assessment tool- may want to find out other perspectives
- When participant lists resources ask more about what makes them helpful, why they refer to them regularly, when they are and are not helpful and how did you find and incorporate them into your practice?

- Formal vs. informal sharing of knowledge- is one more applicable or relevant in your practice setting and why?
- If it comes up, want to clarify if there is a perception that using ANY evidence that takes more time/increases length of stay or spending more time learning new evidence is perceived as a barrier or problematic or if this is supported
- Others have mentioned the competing interests of evidence acquisition and use and hospital discharge- does this theme come up again and if so explore further (what happens if you want to do something that fits best practice but doesn't match the bottom line of the facility)
- Formal resource sharing with manager or showing how you're using evidence- is this done and how and if not, why not?
- Other people have identified you as someone who facilitates access to evidence for clinicians. Can you tell me about how this fits in your role (from your perspective)?
- In what other ways do you feel it's important for you to be involved in sharing evidence? Are there other aspects of your role that support clinicians to use evidence or engage in evidence informed practice?
- One of the ideas that has been discussed in the literature is the idea of positions that bridge between the research or academic world and clinical practice (explain that this can include partnerships between clinicians and researchers or positions that are held jointly between academic and clinical environments). From your perspective do you see this occurring in some form presently? What are your

thoughts on this idea? What do you see as necessary to facilitate these kind of roles?

- What barriers do you see from your perspective to clinicians engaging in using evidence in their practice? (this can be acquiring, translating or implementing steps)

Appendix G: Field Notes Guide

Field notes should include the following:

- The participant's identifier
- How long the interview took (record start and end times of interview)
- Observations about the interview
- Relevant non-verbal information observed during the interview
- Key themes and direct quotes noted during the interview
- Questions the participant asked the interviewer
- The interviewer's thoughts and observations- whenever possible try to note this using a different colour ink or on a separate page to indicate that this is the interviewer's perspective rather than the participant's
- Any bias noted by the interviewer

Appendix H: Follow-up email

Subject: Interview Follow-Up

Body of email: Thank you for participating in an interview for the study engaging in evidence-informed occupational therapy practice. As you recall from the interview, you are being sent a copy of the summary (insert and verbatim transcript if you have chosen this) of your interview. It is important to make sure that the information in this summary (and verbatim transcript if they have chosen) is an accurate reflection of your perceptions and experiences. Please take some time to review the attached document to ensure that it represents your perceptions and experiences as you relayed them in your interview. You will find that this document includes quotes which may be included in any final report from this study. If there are any quotes you do not wish to have included in any report because you are concerned that they might identify you, please let me know which quote(s) you want to be removed. You may do so by indicating in a follow-up email or in writing. Please send me any feedback, quotes you wish to have removed or any other questions or concerns within the next three weeks. If you do not have any concerns or wish to make any changes please send me a brief message indicating this. If you have any further questions do not hesitate to contact me by email at dharling@hsc.mb.ca or by telephone at (204)787-3800.

Danielle

Note: the summary of the participant's interview (and verbatim transcript if they requested a copy) will be included with this email

Appendix I: Follow-up recruitment email

Subject: Invitation to participate in a research study on the use of evidence in occupational therapy practice.

Body of email:

Hello OT colleagues. Some of you may recall reading an email invitation to participate in a research study a few months ago. I am still looking for study participants, and I am interested in learning the perspectives of occupational therapists working in mental health and in pediatrics. If you are interested in participating in this study, please see the original recruitment email details below.

You are invited to participate in a research study. The study will be led by Danielle Harling, Occupational Therapist at Health Sciences Centre as a requirement of her Master of Science (Post-professional- Occupational Therapy) degree and is being completed with the support of the occupational therapy department.

The purpose of this qualitative study is to understand how occupational therapists use evidence in their practice. In occupational therapy, evidence includes what we know from research, theory, as well as clinical experience and clinical reasoning as well as what we have learned from our clients and their families.

Your participation will consist of a 30-60 minute in-person interview which will be completed on-site but outside of work hours. You will also be asked to review a summary of your interview after it has been transcribed to review it for accuracy.

While there are no direct benefits to participating in this research, your input would be helpful in better understanding how occupational therapists at Health Sciences Centre use evidence in their practice. The information learned during this study will be shared with you and with the occupational therapy discipline director. It may also be shared with other occupational therapists at the site in the future, but the information you share will unidentifiable in any reports.

All participation is voluntary and has no impact on your current work status. Participants can withdraw from the study at any time.

If you are interested in participating, please contact Danielle Harling at (204)787-3800 or by email at dharling@hsc.mb.ca to further discuss the study.

APPENDIX J: Letter of Permission to use Figure

Canadian Association of Occupational Therapists
Association canadienne des ergothérapeutes

CAOT Publications ACE
Copyright Request

October 11 2016

Darielle Harling
86 Martin Ave West
Winnipeg, MB
R2L 0B4

Dear Darielle,

According to your request, you would like permission to use the CMOP-E diagram to be used in your thesis titled "What factors enable therapists to engage in the occupation of evidence-informed occupational therapy practice" presented at Dalhousie University.

Figura1.3 (CMOP-E) Canadian Model of Occupational Performance in Polatajko H., Townsend E., Craik. J. (2007). *Enabling Occupation II: Advancing an Occupational Therapy Vision for Health, Well-Being, & Justice through Occupation.* Ottawa, ON, CAOT Publications ACE. p. 23.

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Thank you
Yours sincerely,

Stephane Rochon
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