

CONTINUING EDUCATION ARTICLE

Adopting an Evidence-Informed Approach for Children and Youth Practice

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This CE Article was developed in collaboration with **AOTA's Children & Youth Special Interest Sections**.

ABSTRACT

The occupational therapy evidence base for children and youth has grown exponentially over the last decade, and practitioners now have increased opportunities to access it from a number of sources. Despite increased availability, evidence is not always routinely incorporated into practice for a variety of reasons including time, skills, and support. This leads to a gap between the published evidence and clinical practice. Being able to appraise evidence and apply it to practice is part of a consistent and coherent knowledge translation approach that proactively bridges that gap. Professional reasoning is a crucial part of this process.

This article will explore the concepts related to evidence-based practice and identify strategies for enhancing the translation of evidence into everyday practice in children and youth contexts.

LEARNING OBJECTIVES

After reading this article, you should be able to:

1. Examine strategies to increase knowledge translation skills
2. Describe the limitations of the traditional evidence hierarchy in relation to occupational therapy practice
3. Discuss evidence-informed decision-making strategies used in pediatric practice
4. Identify the role of data-based decision making in knowledge translation.

INTRODUCTION

Evidence-based practice (EBP) is a cornerstone of occupational therapy and a familiar topic across health and educational settings. There is an increased drive to use evidence to inform decision making at individual and organizational levels to improve client outcomes and ensure that clinical decisions include not only the practitioner's experience and individual client contexts, but also the best available empirical evidence (Brown, 2017; Sackett et al., 1996). Definitions and understanding of the evidence-based process can vary, however a common feature is the focus on establishing a framework that facilitates improved clinical decision-making and critical appraisal of the literature (Parrish, 2018). The complexity of accessing, appraising, and subsequently implementing evidence in practice requires time, resources, skills, and energy. In health and educational contexts that are increasingly stressful and complex, children and youth practitioners need to develop and use strategies that are both efficient and effective and easily incorporated into their existing routines.

EVIDENCE-BASED PRACTICE

The concept of EBP first emerged in the field of medicine during the 1980s and 1990s (Thoma et al., 2015) with the seminal work of David Sackett and colleagues (1996). While initially described in the literature as evidence-based medicine, the broader concept of EBP has since been embraced by other health and wellness professions, including occupational therapy (Hinojosa, 2013). A core pillar of the American Occupational Therapy Association's (AOTA's) Vision 2025 is for occupational

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therapy to be both an evidence-based and client-centered profession (AOTA, n.d.a). The traditional EBP process integrates clinical expertise, the client's goals and desires, and the best available research findings to guide decision making during clinical care (Al-Jundi & Sakka, 2017; Sackett et al., 1996). An EBP approach can be used to guide both evaluation and intervention efforts and aims to increase the consistency of practice to most effectively treat clients and achieve health equity. If the EBP perspective is too restrictive, it may not adequately serve the diverse presentation of clients across a variety of sociocultural contexts. Despite the existence of EBP in the United States for more than 25 years, it is not routinely implemented or adapted to meet the needs of diverse populations; therefore, health disparities continue to exist (Alvridex et al., 2019). Contributing factors include challenges with the generalizability of existing evidence to underrepresented populations, and limited consideration of sociocultural diversity including ethnically and racially diverse populations (Haeok Lee et al., 2013). While recent clinical practice guidelines and systematic reviews summarizing evidence-based occupational therapy interventions for children and youth have been informative, they do not address the issue of how the evidence does (or does not) apply to underrepresented populations (Cahill & Beisber, 2020; Clark & Kingsley, 2020; Gronski & Doherty, 2020; Laverdure & Beisbier, 2020).

Knowledge translation (KT) broadly describes the process of applying evidence to practice (Donnelly & Cramm, 2016; Mallidou et al., 2018). The barriers to implementing EBP are well documented (Fulcher-Rood et al., 2020; Greenwell & Walsh, 2021; Johnson, Coffelt & Gabriel, 2017; Marr, 2017). They include evolving definitions of EBP, lack of access to evidence, limited time to find and interpret evidence, negative attitudes toward evidence, and limited confidence in interpreting or applying research findings (Thomas & Law, 2013). One of the greatest barriers for many practitioners is limited access to evidence. Unless they have associations with higher education, or are members of professional associations, practitioners may have few opportunities to access current evidence.

To address knowledge translation (KT) barriers, Marr (2017) advocated for practitioner support and assistance in the following ways:

- Increase awareness of current EBP concepts and terms and their evolution
- Improve access to resources to support the development and implementation of EBP models
- Create systems to connect researchers with practitioners to conduct occupational therapy-focused research and facilitate knowledge translation.

Recognizing that KT is a complex process, Mallidou et al. (2018) synthesized the literature and identified core KT competencies in the areas of knowledge, skills, and attitude. Knowledge competencies include understanding EBP processes and being aware of sources of evidence. Skills competencies include being able to synthesize information from multiple sources and

being able to apply the evidence to practice. Attitudinal competencies include valuing research and teamwork, and having a lifelong commitment to learning.

To make EBP more accessible, Marr (2017) recommended practitioners develop skills in finding and critically appraising relevant literature. This appraisal includes being able to evaluate the validity, reliability, credibility, and overall quality of the literature, in addition to its applicability to each practitioner's context. Although occupational therapy practitioners are taught how to review and appraise literature, being a judicious consumer of literature is a skill that requires consistent practice and honing to refine for practical use. This can be facilitated through strategies such as mentorship, practice, and collegial discussion.

A linear hierarchy has traditionally guided practitioners in ranking the available evidence. In this five-level hierarchy, randomized controlled trials (RCTs), systematic reviews, and meta-analyses are regarded as superior to descriptive studies, single subject designs, and case studies. The examination of large numbers of subjects, random allocation to either experimental (intervention) or control groups, and research designs that emphasize a comparison between experimental and control groups make sense when trying to objectively evaluate the efficacy of discrete interventions or approaches.

Although the traditional EBP approach is sound in theory, the realities of occupational therapy do not easily lend themselves to the use of this model in practice. For example, occupational therapy practitioners often work with heterogeneous groups of clients, even if the client base has commonalities of age, diagnosis, or background. In practice, the sample populations used in research studies such as RCTs rarely conform exactly to the clients on the practitioner's caseload, which renders the application of the evidence more challenging.

Children and youth often present with multiple or complex needs that are rarely described or captured adequately in studies qualifying for the higher levels of the traditional evidence hierarchy. Walters (2019) considered this challenge in relation to children and youth with mental health needs who do not respond as well as expected to evidence-based interventions. The author noted that practitioners often need to consider the influence of primary and secondary symptoms and that researchers need to develop multi-layered approaches that address clients with complex presentations or comorbidities.

Research conducted in controlled settings aims to minimize the effects of outside forces skewing the results of the study, reduce confounding variables, and increase the quality of the resulting data. Confounding variables and factors that may cloud research results include the effect of the physical or social environment on the subject, the influence of the therapeutic relationship, or the presence of other therapies or interventions in which the subject is involved. The same factors that cloud research results are the components often considered to be integral parts of the successful occupational therapy process, such as the therapeutic connection between practitioner and client. This reality presents professional dilemmas about the applicabil-

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ity of study results when the research itself may not be designed to reflect the occupational therapy process or values.

A BROADER VIEW OF EVIDENCE

To address some of the limitations of the traditional evidence hierarchy, Tomlin and Borgetto (2011) developed the concept of a multidimensional research pyramid. This model acknowledges the dynamic interactions that occur in the occupational therapy process and considers the complexities of occupational performance. Furthermore, it recognizes the significant role of the individual's subjective experience and places qualitative research "at parity" with other methodologies.

The research pyramid divides evidence into four broad categories: descriptive research, experimental research, outcome research, and qualitative research. Descriptive research forms the base of the pyramid, while the three remaining categories form the sides. Rather than judge evidence on a single, linear hierarchy, Tomlin and Borgetto's three-dimensional pyramid offers an alternative lens through which to evaluate the breadth of research that is meaningful to occupational therapy. This approach emphasizes the importance of rigor while acknowledging that different criteria are required depending on the study design (e.g., single-subject study versus systematic review).

In essence, it does not unfairly compare research designs that are dissimilar yet still valuable to the profession. This research pyramid highlights the value of multiple research traditions, while recognizing the challenges of evaluating occupational therapy as a complex intervention (Creek et al., 2005). As a profession, occupational therapy needs to continue to advocate for qualitative research as a crucial pillar of evidence-based practice that not only informs professional reasoning, but also assists practitioners to make informed clinical decisions (Tomlin & Swinth, 2015).

EVIDENCE-INFORMED PRACTICE

Tomlin and Borgetto's perspective is a helpful reminder that while the results of traditional research may be informative, they may not easily translate directly into authentic occupational therapy clinical practice. As a profession that places a high value on an individualized client-centered approach, there may be significant challenges with implementing evidence based primarily on the traditional hierarchy. Practitioners need to be able to apply their clinical reasoning skills to determine whether the evidence in the published literature can be implemented in their specific practice context. This requires not only the ability to appraise the evidence, but also the ability to self-reflect and determine whether there are openings for practice change that incorporate new or different ways of working.

In a guest editorial for the *American Journal of Occupational Therapy* focusing on evidence for interventions for children and youth, Grajo, Laverdure, and colleagues (2020) made the case that occupational therapy practitioners need to become critical consumers of the evidence. Acknowledging the gap that frequently exists between evidence and practice, the authors advocated for practitioners, educators, and scholars to identify strategies to overcome the existing barriers to implementing the

available evidence. It takes time to access the available evidence and appraise it for goodness of fit with individual clients in unique practice contexts. Important elements in the KT process include not only consideration of client characteristics, but also appraisal of practitioner characteristics including clinical experience, KT skills, and receptivity to the evidence base. In summarizing some of the challenges of KT, Laverdure (2019) noted that it can be hard for practitioners to step outside of familiar practice patterns to embrace a new evidence base. Although this may be true in some cases, it is also important to recognize the nuances of an evidence-informed practice approach that is more than the "all or nothing" approach sometimes associated with a traditional evidence-based approach.

There has been ongoing discussion in the health and social care literature about the value of adopting an evidence-informed approach that more clearly considers the role of clinical reasoning in the KT process (Benfield & Johnson, 2020; Graaf & Ratliff, 2018; Steiger, 2017). This approach recognizes the complexity of clinical practice as well as understands that practitioners often need to adapt the available evidence to meet the needs of individual contexts (Graaf & Ratliff, 2018). It is crucial that occupational therapy practitioners can articulate their clinical reasoning as to why they may have incorporated elements of the evidence rather than the whole, based on goodness of fit with their specific practice context. This requires practitioners to use their advocacy skills in partnership with clinical reasoning and client-centered practice to merge the "art and science" of the profession in order to better serve diverse clients (Dirette, 2016).

Equally, it is essential that practitioners are open to sifting through the evidence to identify what can be applied in their setting and be amenable to consider doing things differently based on the evidence. Bannigan and Moores (2009) advocated for a "model of professional thinking" in occupational therapy that more explicitly integrates clinical reasoning with evidence-based practice, and that considers the complexity of practice. This approach recognizes the importance of reflective practice as a crucial element in the decision-making process related to the application of published evidence.

Furthermore, it takes account not only of practitioners' clinical experiences but also the broader sociocultural and organizational contexts in which they work. As such, it is a good fit with an evidence-informed approach, which requires practitioners to self-reflect and make decisions about how to integrate aspects of published evidence while also collecting data about the efficacy of interventions that are based on those evidence-informed decisions.

APPLYING EVIDENCED INFORMED DECISION MAKING

Define the Question, Review the Literature

Evidence-informed decision making has evolved from EBP and expands the original concept of using evidence to inform clinical decision making. In combination with clinical reasoning, the three core elements of EBP provide the foundation for evidence-informed decision making, which begins with defining the clinical question (see Figure 1). The reasons behind the

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question will vary. Perhaps it is a referral for a child with an unfamiliar diagnosis, in which case a background question may be, “What are the best occupational therapy interventions for a child with this condition?” There may be a need to determine which of two interventions are most effective, such as, “Are social stories or video modeling more effective for developing social skills in teens with autism?” Alternatively, the question may be related to outcome measurement—for example, “What is a reliable outcome measurement tool for measuring change in the ADL performance of youth with cerebral palsy?”

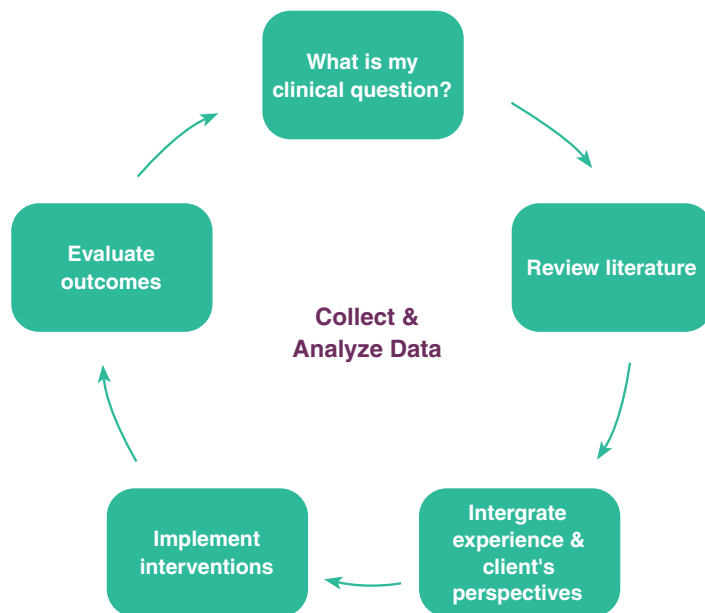
After the question is defined, the occupational therapy practitioner must then consider what available evidence exists in the form of research studies, practice guidelines, and professional publications. To increase practitioners’ accessibility to evidence, AOTA made an explicit commitment to EBP through the creation of an evidence-based literature review project more than 20 years ago (Lieberman & Scheer, 2002). This has since expanded and now includes access to critically appraised topics, clinical practice guidelines, and systematic reviews (AOTA, n.d.b).

AOTA has published practice guidelines for a variety of populations of interest to children and youth practitioners. These include *Early Childhood: Birth Through 5 Years* (Clark & Kingsley, 2020), *Children and Youth Ages 5–21* (Cahill & Beisbier, 2020), *Children and Adolescents With Challenges in Sensory Processing and Sensory Integration* (Watling et al., 2018), and *Individuals With Autism Spectrum Disorder* (Tomchek & Koenig, 2016). Practice guidelines provide practitioners with a summary of the evidence in relation to interventions and practices under the scope of occupational therapy’s domain of concern. They assist occupational therapy practitioners in accessing the literature quickly and easily and support clinical decision making grounded in evidence. They also highlight gaps in the existing literature, thereby providing practitioners and researchers with ideas for conducting research the profession needs.

In addition to practice guidelines, AOTA Official Documents provide practitioners with guidance through guidance documents, position statements, professional standards, societal statements, and professional policies. These documents support clinical decision making by addressing issues in specific areas of practice, such as occupational therapy’s role in the neonatal intensive care unit (AOTA, 2018); early intervention and school-based services (AOTA, 2017a); and feeding, eating, and swallowing (AOTA, 2017b). Practitioners can use these documents to define the role of occupational therapy in these specific areas and the scope of practice as defined by the profession.

Delving into the literature can inform practitioners about research questions that have already been addressed, as well as highlight those that require further investigation. Research studies are useful in guiding EBP, as practitioners can apply the findings of well-designed studies to their own clinical practice. Journal publications provide occupational therapy practitioners with a wide variety of topics and articles across practice settings. They often contain evidence generated across the continuum of research design, including single research studies, case studies, and systematic reviews. Journals are available

Figure 1: Applying Evidence-Informed Decision Making



that focus on the occupational therapy profession as a whole or pediatrics in particular. Table 1 lists several publications, including those providing content specifically relevant to occupational therapy practitioners in children and youth practice contexts, such as early intervention or school-based practice. As part of the EBP decision making process, it is beneficial to identify a range of scholarly resources that provide robust examples of the application of interventions and outcomes to clinical practice.

There are a variety of ways to access the available evidence. AOTA membership provides access to international journals in addition to resources such as systematic reviews, practice guidelines, and critically appraised topics. Registration with the National Board for Certification in Occupational Therapy offers access to the Proquest database for scholarly journals and dissertations. Occupational therapy practitioners might consider the benefits of hosting fieldwork and capstone students who have access to a school library and subscription services. Students can often complete literature reviews and topic research to support evidence-informed decision making with access to these additional resources. Practitioners may opt to have subscriptions to publications specific to a practice area or may want to access broader databases like PubMed or Cochrane (see Table 1).

Integrate Experience

Having defined the question and incorporated the available literature, the occupational therapy practitioner must then consider their own practice experience and that of others. Experienced practitioners bring real-world clinical expertise to the process of EBP and decision making, as not every question can, or should, be answered strictly through the literature. Networking with other practitioners provides opportunities to incorporate the clinical expertise of others to one’s own clinical dilemmas.

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AOTA offers a variety of forums (CommunOT) and groups (Communities of Practice) to engage with other practitioners to discuss clinical questions and share experiences. State organizations often have specific groups, including at the local level, to collaborate with others in similar practice settings. Developing the occupational profile and exploring the client's personal experiences, values, and beliefs allows the occupational therapist (OT) and client to collaborate to develop individualized and relevant interventions. The EBP process can also assist OTs to identify reliable outcome measures consistent with the client's perspectives and values.

Implement Interventions and Assess Outcomes

After critically analyzing the available evidence and incorporating the experiences of the client and practitioner, the OT must then develop the plan for implementation, outcome tracking, and evaluation. This plan, collaboratively made with the client, allows the OT to implement intervention strategies, collect data on the effectiveness of such strategies, and analyze this data. The process of tracking outcomes using objective data is an important step in the EBP process. However, measuring outcomes can sometimes be challenging when standardized instruments that are sensitive enough to detect changes in performance are not readily available. One-way OTs can overcome this challenge is to use individualized, participation-focused outcomes to track change and guide intervention.

Operationalizing—or describing the client's occupational challenges in objective, measurable terms—is crucial, and establishing the baseline data is an important step. For example, for a child with difficulty using utensils at mealtimes, the occupational therapy practitioner could track how many times the child successfully scoops food with a spoon during a 20-minute meal. Gathering this baseline data provides a starting point to establish measurable, achievable goals; gain insight to potential causes of the behavior; and then formulate an intervention approach and plan supporting functional participation in the identified occupations.

After identifying the factors that influence the child's occupational performance, the OT develops an intervention plan based on the client's needs and EBP resources. Throughout treatment, the occupational therapy practitioner continues to collect data to ensure that target outcomes are progressing toward achieving goals. If the data indicates that the client's occupational performance is not improving, the OT can go back to the literature to shift course in treatment. Using data to make practice decisions enhances outcomes for clients, and dissemination of outcomes can further enhance the literature and expertise of other occupational therapy practitioners, building the base of EBP resources.

PRACTICE-BASED EVIDENCE CONSIDERATIONS

Despite an increase in the overall amount of pediatric evidence available, there are still gaps in the published literature in relation to interventions commonly used in occupational therapy practice. Practitioners may implement popular interventions that reflect trends in practice, although they may not be supported by an empirical evidence base. Anecdotally, practitioners report that specific interventions are effective for individual clients, even if there is a lack of robust literature supporting them.

Table 1: Strategies and Resources to Support Evidence-Informed Practice

Strategies and Resources	
Utilize Data-Driven/Data-Based Decision Making	Clark et al, 2019; Faller et al., 2019; Schaaf, 2015
Access the Literature	<i>American Journal of Occupational Therapy</i> * <i>Australian Occupational Therapy Journal</i> * <i>British Journal of Occupational Therapy</i> * <i>Canadian Journal of Occupational Therapy</i> * <i>OTJR: Occupation, Participation and Health</i> * <i>Open Journal of Occupational Therapy</i> (free open-access) <i>Journal of Occupational Therapy, Schools, and Early Intervention</i>
Explore AOTA's Evidence Based Practice Resource Directory*	Critically Appraised Topics Evidence Exchange Understanding Research Study Designs
Incorporate Practice Guidelines*	<ul style="list-style-type: none"> • Early Childhood: Birth–5 years • Children and Youth ages 5–21 • Children and Adolescents With Challenges in Sensory Processing and Sensory Integration • Individuals With Autism Spectrum Disorder
Access databases	<ul style="list-style-type: none"> • Shirley Ryan Ability Lab https://www.sralab.org/rehabilitation-measures • Google Scholar https://scholar.google.com/ • Cochrane https://www.cochrane.org/ • PubMed https://pubmed.ncbi.nlm.nih.gov/
Participate in Children & Youth Special Interest Section Mentoring Program*	Share & gain skills
Join a Community of Practice*	ASD, Pediatric Trauma, School Mental Health
Engage with CommunOT*	Online evidence-informed discussions Focused Practice Chats
Partner with researchers at local University	

*AOTA member benefit

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Implementation science research suggests it takes 17-20 years to integrate even a small percentage of recommendations from research into clinical practice (Campioni et al., 2021; Morris et al., 2011). The delay in translating evidence to practice creates barriers to receiving evidence-informed care for children and families. To build the evidence base, practitioners should systematically keep data and obtain the necessary requirements to disseminate it through publication in the form of single case studies or case series.

Occupational therapy practice scholars have suggested a variety of strategies for increasing the translation of evidence to practice (Clark et al., 2013; Grajo, Laverdure et al., 2020; Juckett et al., 201). Approaches include Data Driven Decision Making (DDDM) (Schaaf, 2015) and gaining KT competency. Timely translation of knowledge from research to practice is essential for achieving optimal outcomes for children and families.

Data-Based Decision Making

Making decisions that are based on objective data is a crucial element of clinical practice. Data-driven decision making (DDDM) is an evidence-supported, outcome-driven process that guides clinical reasoning (Carroll et al., 2017; Schaaf, 2015). In a school-based practice context, this is similar to a data-based decision-making approach (Clark et al., 2019).

Using objective data to make decisions can “bridge the research to practice gap by creating evidence through practice” (Carroll et al., 2017, p.2). Describing clients’ occupational performance challenges in objective terms aids in identifying appropriate intervention strategies and creating measurable outcomes. In relation to implementing practice trends that may not yet be well-supported by empirical evidence, a systematic data-based approach can help generate evidence for further dissemination. Figure 2 describes a series of steps that may be taken during the process of transforming practice-based evidence to EBP over time.

During implementation of this approach, practitioners systematically gather data to guide the intervention and evaluation processes. This data may also be used to demonstrate the effectiveness of occupational therapy services through creating and disseminating practice-based evidence (Schaaf, 2015).

Gaining Knowledge Translation Competency

Grajo, Laverdure, and colleagues (2020), identified strategies for practitioners to develop competency in translating knowledge into practice. First, starting or joining a journal club can

increase skills in searching for and extracting relevant information from literature with support from colleagues. Next, leveraging the benefits offered by professional organizations can provide access to resources for finding and interpreting research. AOTA’s Evidence Based Practice Resource Directory includes practice guidelines, Critically Appraised Topics, and a collaboration platform (CommunOT) as part of its commitment to promoting the use of evidence by the profession (Table 1).

Finally, occupational therapy practitioners can collaborate with researchers to provide insight into the challenges of integrating EBP into pediatric practice while learning about current and relevant research innovations.

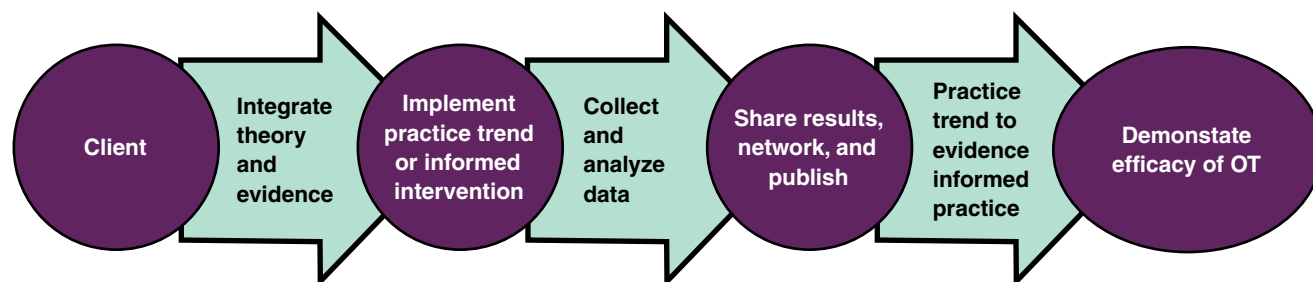
Case Example: Jada

Jada was a new OT who had just started her first job in school system practice with K–5 students. Leaving occupational therapy school, Jada felt empowered to focus on theory and evidence to guide practice. She was excited to have an experienced and well-respected OT as a mentor in her new job. The mentor demonstrated excellent therapeutic use of self, knowledge of the individualized education program process, rapport with the school staff, and creative intervention plans.

As Jada became acclimated to her position, many teachers in the school consulted her about handwriting intervention. Jada had one child on her caseload with significant concerns in this area, a second grader still struggling to form the letters of his name. Based on her review of past evaluation reports, she learned this child had dyspraxia and visual motor challenges. She noted the previous OT had pulled him out of class weekly for 20 minutes to address motor planning, visual tracking, and scanning using multi-sensory strategies. For example, one week, the student made shapes in sand and completed drills for crossing midline (e.g., cross crawl). Although the student really enjoyed his time in occupational therapy, his handwriting had not improved.

Considering what to do next, Jada recalled the three elements of the EBP triad: integration of critically appraised evidence; clinical expertise; and client preferences, beliefs, and values. Beginning with clinical expertise, she approached her OT mentor, who shared that sensory motor preparatory activities were commonplace and considered best practice 10 years ago when she served children in younger grades. When Jada met with her student, he expressed his affinity for the

Figure 2. Transforming Practice-Based Evidence to Evidence-Based Practice (informed by Schaaf, 2015)



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multi-sensory preparatory activities and said he hated writing. With input from her colleague and the student, Jada decided to continue a multi-sensory approach to remediate motor planning deficits. However, she initiated a plan for data collection to monitor change, beginning with collecting data at baseline and then regularly as she met with the student. Baseline data revealed her student formed 5/26 letters correctly; analyzing the data after 4 weeks demonstrated that nothing had changed.

Jada remembered reading about best practice for handwriting while in OT school. She searched the literature and found several newer articles confirming that integrated practice in the classroom engaged in the occupation of writing, was considered best practice (Grajo, Candler, & Sarafian, 2020). She also reviewed the legislative context framing school-based practice and noted that providing services in the student's least restrictive environment was mandated (Schneider & Chandler, 2019). Browsing the literature, Jada identified a collaborative practice model, Partnering 4 Change, used by occupational therapy practitioners and teachers to support children's participation in the classroom (Wilson & Harris, 2018). Jada collaborated with the teacher to schedule time to work with a small group, including her student, in the classroom during free write time. Using a motor learning and task-oriented frame of reference (described in Cole & Tufano, 2020), she developed strategies for the children to practice letter formation in the context of the free write assignment, providing opportunities for repetition and specific feedback. She also utilized the Model of Human Occupation (Kielhofner & Forsyth, 1997) to increase the students' motivation to write. Working alongside peers and sharing writing ideas encouraged the students' participation in writing tasks. Jada continued to collect data, and after 2 weeks her student improved to writing 10/26 letters correctly. By the end of the year, he had mastered all 26 letters.

Jada shared her experiences along the way with her mentor OT. To support knowledge translation, they formalized their self-examination and started a journal club with other school-based occupational therapy practitioners in the district. The group met weekly to discuss journal articles and translate evidence into practice for specific students on their caseloads. In addition, Jada joined the AOTA school-based practitioner CoP and found that networking with other occupational therapy practitioners nationally further challenged her clinical reasoning skills and expanded her knowledge.

CONCLUSION

To effectively engage in evidence-informed practice that facilitates positive outcomes for children and families, occupational therapy practitioners must synthesize knowledge and experiences from multiple sources and perspectives. Incorporating the best available evidence is essential and must be paired with professional reasoning, in collaboration with the client's knowledge, values, and preferences. Using evidence-informed decision making allows practitioners to remain evidence driven and client-centered while also demonstrating the efficacy and

value of the profession. In order to make Vision 2025 (AOTA, n.d.a) a reality, children and youth practitioners must embrace an evidence-informed approach as part of everyday practice.

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- A. To get pricing information and to register to take the exam online for the article **Adopting an Evidence-Informed Approach for Children and Youth Practice**, go to <http://store.aota.org>, or call toll-free 800-729-2682.
- B. Once registered and payment received, you will receive instant email confirmation.
- C. Answer the questions to the final exam found on pages CE-8 & CE-9 by **September 30, 2024**
- D. On successful completion of the exam (a score of 75% or more), you will immediately receive your printable certificate.

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Final Exam

Article Code CEA0921

Adopting an Evidence-Informed Approach for Children and Youth Practice

To receive CE credit, exam must be completed by September 30, 2024

Learning Level: Intermediate

Target Audience: Occupational Therapists and Occupational Therapy Assistants

Content Focus: Category 1: Occupational Therapy Process; Evaluation and Intervention; Professional Issues: Evidence Informed Practice

- What three key elements are integrated in a traditional evidence-based practice approach?**
 - Communities of Practice, client perspectives, and research findings
 - Clinical expertise, social media networking, and client interests and needs
 - Clinical expertise, client perspectives, and research findings
 - Research findings, Journal Clubs, and Communities of Practice
- What is one way to measure outcomes when a standardized instrument that is sensitive enough to change is not available?**
 - Develop a standardized instrument that is sensitive to change.
 - Use an instrument that you are familiar with, even it isn't perfect
 - Ask a researcher to help
 - Use participation-focused outcomes to track change
- In relation to authentic occupational therapy practice, what is one challenge with placing Randomized Controlled Trials (RCTs) at the top of the traditional EBP hierarchy?**
 - RCTs are not valid and reliable
 - The complexity and heterogeneity of the OT caseload is not easily captured in an RCT
 - RCTs are often completed in the clinic where confounding variables are not easily controlled
 - RCTs do not control for confounders
- Which pillar of the EBP triad may be identified through developing an occupational profile?**
 - Best available research
 - Client's perspectives
 - Client factors
 - Practitioner's experience
- Which of the following is an example of a measurable behavior?**
 - A child's socialization skills demonstrated at recess
 - The number of times a child leaves their seat in a 30-minute math class
 - A child's willingness to dress and undress
 - A child's ability to follow an adult's lead during unstructured play activities
- A child with autism is struggling to eat a variety of age-appropriate foods due to food refusal based on texture. What baseline behavior might the occupational therapy practitioner (OTP) gather to track change in the child's food acceptance?**
 - The child's grasp pattern on the utensil
 - The number of different foods the child ate over the last week
 - The child's ability to tolerate messy play
 - The number of times the child gets up from the table during meals
- Which of the following is true in relation to data-based decision making?**
 - It requires use of a specific protocol
 - It allows the OTP to ignore the evidence
 - It can only be used in school-based settings
 - It has the potential to produce practice-based evidence
- What is the first step in evidence-based decision making?**
 - Reviewing the literature
 - Assessing outcomes
 - Integrating experiences
 - Defining the clinical question
- OTPs include a variety of factors to engage in evidence-informed practice, including:**
 - Only using RCTs to make decisions in practice
 - Reviewing systematic reviews and meta-analyses for every client
 - Incorporating best available evidence with professional reasoning and client preferences
 - Unquestioningly implementing information from continuing education resources

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10. Which of the following is an example of an attitudinal knowledge translation competency?
- A. Understanding the evidence-based practice process
 - B. Having a lifelong commitment to learning
 - C. Being able to synthesize evidence from multiple sources
 - D. Knowing where to locate the evidence
11. In addition to evidence-based practice, what is the other key element in a model of professional thinking that reflects the complexity of occupational therapy practice?
- A. Time to access the literature
 - B. Research skills
 - C. Skills in data collection
 - D. Clinical reasoning

12. Which of the following EBP resources are offered to members by AOTA?
- A. Systematic Reviews, Practice Guidelines, and Critically Appraised Topics
 - B. Journal of Occupational Therapy, Schools, and Early Intervention
 - C. *Open Journal of Occupational Therapy*
 - D. Self-reflection templates

Now that you have selected your answers, you are only one step away from earning your CE credit.



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