Building Capacity of Occupational Therapy Practitioners to Address the Mental Health Needs of Children and Youth: A Mixed-Methods Study of Knowledge Translation

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PURPOSE. We explored the meaning and outcomes of a 6-mo building capacity process designed to promote knowledge translation of a public health approach to mental health among pediatric occupational therapy practitioners participating in a Community of Practice.

METHOD. A one-group ($N = 117$) mixed-methods design using a pretest–posttest survey and qualitative analysis of written reflections was used to explore the meaning and outcomes of the building capacity process.

RESULTS. Statistically significant improvements ($p < .02$) in pretest–posttest scores of knowledge, beliefs, and actions related to a public health approach to mental health were found. Qualitative findings suggest that participation resulted in a renewed commitment to addressing children's mental health.

CONCLUSION. The building capacity process expanded practitioner knowledge, renewed energy, and promoted confidence, resulting in change leaders empowered to articulate, advocate for, and implement practice changes reflecting occupational therapy's role in addressing children's mental health.

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Occupational therapy has a rich history of promoting mental health in all areas of practice through the use of meaningful and enjoyable occupations (Meyer, 1922). Despite this long-standing perspective, reference to *mental health* is often interpreted to mean mental illness and the interventions used to ameliorate mental health problems (Gutman & Raphael-Greenfield, 2014). How occupational therapy practitioners think about mental health, however, has a significant impact on how their services are perceived, articulated to others, and implemented. If *addressing children's mental health* refers only to interventions provided for children with identified mental health disorders, then occupational therapy services will be limited to this population. In contrast, if addressing mental health includes strategies aimed at helping children develop and maintain positive mental health, then occupational therapy services will extend to all children with and without identified mental illness in a variety of school-, health care–, and community-based settings (Bazyk, 2011).

Attention to the promotion of positive mental health has been growing both nationally and internationally (Barry & Jenkins, 2007; Miles, Espiritu, Horen, Sebian, & Waetzig, 2010; World Health Organization [WHO], 2001). Research studying the dimensions of mental health and its measurement has

identified a cluster of characteristics present with mental health—positive affect, positive psychological and social functioning, and the ability to adapt to change and cope with life challenges (Keyes, 2007). Mental health is not merely the absence of mental illness but the presence of positive mental functioning. In addition, the development and growth of the field of positive psychology (Donaldson, Csikszentmihalyi, & Nakamura, 2011) has further enhanced the understanding of processes and conditions that promote optimal mental health. Experiencing positive emotions (e.g., joy, gratitude, awe) has been shown to broaden a person's habitual mode of thinking, reduce negative emotions, promote resilience, and fuel psychological and physical well-being (Fredrickson, 2001). Moreover, Csikszentmihalyi's (1993) research has confirmed that people experience the most enjoyment in their lives when they are actively engaged in meaningful activity. These findings reinforce occupational therapy's commitment to helping people engage in meaningful and enjoyable occupation to promote health and well-being.

WHO (2001) has advocated for a public health approach to mental health that emphasizes the promotion of mental health as well as the prevention of, and intervention for, mental illness. Recent occupational therapy publications (Bazyk, 2011, 2013) and evidence-based reviews (Arbesman, Bazyk, & Nochajski, 2013; Bazyk & Arbesman, 2013) have applied a public health approach to mental health to occupational therapy practice with children and youths. Such a multitiered framework supports a change in thinking from the traditional, individually focused, deficit-driven model of mental health intervention to a whole-population strengths-based approach. The three major tiers of service include (1) universal (Tier 1, whole-population mental health promotion), (2) targeted (Tier 2, prevention services for those at risk for mental health challenges), and (3) intensive (Tier 3, individualized services for those diagnosed with mental illness). The application of the occupational therapy process within this multitiered public health framework in school, community, and health care settings has been described in detail in previous occupational therapy publications (Bazyk, 2011, 2013).

Despite the evidence-based publications devoted to applying a public health approach to mental health in occupational therapy with children, a major concern has been the efficient transfer of this knowledge to practice (Cramm, White, & Krupa, 2013). Estimates are that it takes an average of 17 yr for only about 14% of new evidence to be applied to clinical practice (Westfall, Mold, & Fagnan, 2007). Because the value of new knowledge is realized only when it is applied, leading to change, it is important to consider how to best bring about knowledge translation (KT) to occupational therapy practice of a public health approach to mental health (Lencucha, Kothari, & Rouse, 2007).

Knowledge translation has been described as the "exchange, synthesis, and ethically sound application of knowledge—within a complex system of interactions among researchers and users"—to apply research to improve health and enhance service delivery (Canadian Institutes of Health Research [CIHR], 2004, p. 4). Leaders in the field of KT have indicated that knowledge is transferred best when dynamic and iterative interaction occurs among diverse stakeholders using active learning strategies that include some face-to-face interaction to share tacit knowledge (Barwick, Peters, & Boydell, 2009; Straus, Tetroe, & Graham, 2009). In addition to the traditional value of evidence-based practice (EBP), KT values the role of practice knowledge (Korthagen, 2005), calling for a bidirectional relationship between researcher and therapist to "produce research that is relevant to practice and to produce practice that is supported by research findings" (p. 595). The close collaboration between researchers and stakeholders during the entire research process has also been referred to as *integrated KT* (CIHR, 2014). Successful KT actively engages practitioners in the learning process by strategically encouraging practice reflection—thinking about the relevance and application of new knowledge to practice. Moreover, because health care providers often seek colleagues as a source for learning, *Communities of Practice* (*CoPs*) have been recommended as a critical mechanism for promoting KT (Barwick et al., 2009). Based on social learning theory, a CoP is a group of people who come together with a mutual concern for an area of practice and interact regularly to learn, problem solve, share resources, and develop new ways of doing (Wenger, McDermott, & Snyder, 2002).

Every Moment Counts: Promoting Mental Health Throughout the Day is an occupational therapy–led mental health promotion initiative funded by the Ohio Department of Education, Office of Exceptional Children (2012–present). Guided by a public health approach to mental health, the focus of this initiative is to help all children and youths become mentally healthy to succeed in school, at home, and in the community. A major goal of Every Moment Counts has been the development and implementation of model programs (Comfortable Cafeteria, Refreshing Recess, Leisure Matters) and embedded strategies designed to promote successful and enjoyable participation throughout the day (http://www.everymomentcounts.org). A second major goal has been to build capacity of occupational therapy practitioners to address the mental health needs of children and youths by

applying a public health approach to mental health (Bazyk, 2011).

To reduce the gap between new knowledge and action, the purpose of this mixed-methods design study was to explore the meaning and outcomes of a 6-mo-long *building capacity process* designed to promote KT and the implementation of a public health approach to mental health among occupational therapy practitioners participating in a CoP. This article introduces the building capacity process, intentionally designed to foster KT within a CoP by involving practitioners in a combination of professional development and community-building strategies (reading, reflection, face-to-face meetings, and online discussions) over an extended period of time to translate knowledge to occupational therapy practice. This research is needed because of the limited KT models developed within occupational therapy (Metzler & Metz, 2010). In this study, we sought to shed new light on KT by addressing the following research questions: (1) Does participation in the building capacity process result in enhanced knowledge of and perceived ability to apply a public health approach to mental health with children and youth and (2) what is the meaning of participation and perceived practice outcomes for occupational therapy practitioners who complete the building capacity process?

Method

Research Design

A one-group mixed-methods design using both quantitative and qualitative methods was used to address our research questions and to produce a more comprehensive understanding of the building capacity process developed for this KT study (Denscombe, 2008). A single-group pretest–posttest research design was used to address our first question, and a qualitative study using phenomenological methods was used to address our second question. The institutional review board at Cleveland State University approved the study. Written informed consent was obtained from participants before data collection began.

Participants

Between 2011 and 2015, occupational therapy practitioners (both occupational therapists and occupational therapy assistants) throughout Ohio who work with children and youths were invited to become participants in their region's building capacity CoP. Eight separate CoPs, ranging in size from 13 to 43 practitioners, were implemented in seven geographic regions throughout Ohio during this 3-yr period. Using purposeful sampling and snowball methodology (Patton, 2002), the principal investigator (Susan Bazyk) invited practitioners representing diverse school, clinic, and community settings (rural, urban, suburban, alternative) in each region via email and phone invitations. Participants received a book (Bazyk, 2011) and were able to earn up to 12 continuing education units for full participation in the building capacity CoP over a 6-mo period.

Intervention: The Building Capacity Process

The building capacity process, envisioned by the first author (Susan Bazyk) and implemented as a part of Every Moment Counts, is broader than traditional professional development geared toward individuals; it involves a systematic approach aimed at integrating new knowledge and research into a community of practitioners so that such situated learning becomes a part of the community's expertise (Lencucha et al., 2007). The aim of the building capacity process is to enhance knowledge and application of a public health approach to mental health with children and youths in a variety of settings, leading to the development of *occupational therapy change leaders*—practitioners empowered to change practice on the basis of current knowledge and research. Built on a sound understanding of KT and CoPs, the building capacity process includes the following elements: (1) a dynamic, iterative, bidirectional relationship between researchers and practitioners (Korthagen, 2005); (2) a variety of active learning strategies (reading, face-to-face, and online discussions) that value both research and practice knowledge (Barwick et al., 2009) and encourage practice reflection (thinking about the relevance and application of new knowledge to practice; Lockyer, Gondocz, & Thivierge, 2004); and (3) membership in a CoP as a mechanism for community building, shared learning, problem solving, and sharing of resources and new ways of doing (Wenger et al., 2002).

Based on a belief that learning and change occur over time, the building capacity process was developed to occur over 6 mo. It involved

- Three 3-hr face-to-face meetings scheduled at the beginning, middle, and end of the 6-mo process and held during the evening in a central location
- Participation in six online discussions involving reading, written reflections, and participant sharing.

The purpose of the face-to-face sessions was to meet with the lead facilitators, provide foundation information about the building capacity process and a public health approach to mental health, promote community building among the practitioners and researchers, and share information. The book *Mental Health Promotion, Prevention and Intervention With Children and Youth: A Guiding Framework*

for Occupational Therapy (Bazyk, 2011) was selected as the primary reading source because it was written to be responsive to practitioners' need for information that filters EBP and new knowledge through an occupation-focused lens (Cramm et al., 2013). For each of the six online discussions, participants read two chapters, reflected on the content, and wrote responses to two to three discussion questions designed to promote application of the content to practice. Participants were given an initial deadline for posting their responses in the online community and a second deadline for reading and responding to their colleagues' responses. Although lead facilitators of the CoP participated in the online discussion, efforts were made to foster sharing among participants. This process of reading, reflection, and discussion was designed to foster an active, iterative process of shared learning and problem solving and the application of new knowledge and research to practice within the CoP.

After the initial building capacity CoP with 13 occupational therapy practitioners in 2011, the first author strategically involved these and subsequent occupational therapy change leaders (i.e., practitioners who completed the building capacity process) in cofacilitating additional CoPs throughout the state to build shared leadership for the Every Moment Counts initiative. Each regional CoP was facilitated by one lead occupational therapy change leader and three cofacilitators. To ensure consistent replication of the building capacity process, the first author served as the primary facilitator in educating and coaching the lead facilitators and cofacilitators in the use of the same protocol and materials.

Data Collection

Quantitative Data. On the basis of the content of the readings (Bazyk, 2011) and the online discussions, the first author developed a written survey consisting of 20 closed-ended items to examine participants' knowledge of and perceived ability to apply a public health approach to mental health in practice with children and youths. Participants rated each of the 20 discrete statements on a Likert scale on which 1 = *strongly disagree,* 2 = *disagree,* 3 = *neutral,* 4 = *agree,* and 5 = *strongly agree.* The 20 items were grouped into the following three dimensions: knowledge, belief, and action. Twelve knowledge statements covered perceived knowledge of a public health approach to mental health and the ability to differentiate among mental health promotion, prevention, and intervention (4 items); occupational therapy services at Tiers 1, 2, and 3 (4 items); children at risk of or experiencing mental health challenges (2 items); and relevant frames of reference (2 items). Five belief statements covered perceived ability and confidence in addressing children's mental health in practice (4 items) and belief that other professionals and families are aware of occupational therapy's role related to mental health (1 item). Three action statements covered perceived ability to articulate the role of occupational therapy in addressing children's mental health needs (1 item), addressing occupational therapy's full scope of practice including extracurricular leisure participation (1 item), and actively addressing the mental health needs of children in everyday practice (1 item).

Four occupational therapy practitioners with >20 yr experience in school-based practice and knowledgeable about a public health approach to children's mental health reviewed and revised the survey. After providing written informed consent, participants filled out the pretest in person at the beginning of the first CoP session. The posttest was administered at the final CoP session. Confidentiality was maintained using a link list to compare pretest and posttest responses.

Qualitative Data. Written reflection provided occupational therapy practitioners with an opportunity to process new information and intentionally connect thoughts, feelings, beliefs, and experiences related to the readings and online discussions. Written materials obtained from the participants' first online discussion responses and the final session reflections were compiled and served as the data sources. The online discussion responses were based on reading Chapters 1 and 2 of Bazyk (2011), focusing on a public health approach to mental health and applying it to occupational therapy practice. Written reflections were documented during the final face-to-face session, based on the following prompt: "Think about your reading, reflection, and sharing over the past 6 months. Tell us what this experience has meant to you and how it has influenced your practice as an occupational therapist." Handwritten reflections were typed and compiled into one document for analysis.

Data Analysis

Quantitative Analysis. Raw scores were entered into R version 2.14.1 (R Foundation for Statistical Computing, Vienna, Austria). We compared the pretest and posttest scores of the clustered items using a matched-pairs t test with significance level set at .05. Parametric methods "are incredibly versatile, powerful and comprehensive" (Norman, 2010, p. 627) and can be used with Likert scales. Although Likert items are generally considered ordinal, scales consisting of sums across several items can be viewed as interval data (Norman, 2010).

Qualitative Analysis. The methodology for phenomenological analysis followed for this study was adapted from Polkinghorne (1989). To enhance credibility, two forms of triangulation were used—multiple data sources (online discussions and final written reflections) and multiple data analysts (Patton, 2002). The first author, who has extensive experience in qualitative inquiry, and five graduate occupational therapy students served as multiple analysts. Member checking was also used to enhance credibility by having three occupational therapy practitioners who participated in the building capacity process, and who later served as cofacilitators of CoPs, read the written reflections and initial themes to ensure accurate depiction of the data (Patton, 2002).

Inductive analysis using open coding involves qualitative data reduction, resulting in the identification of core meanings (Patton, 2002). First, the written documents were read individually by the analysts to gain a sense of the whole, followed by a detailed reading of the data, noting relevant and recurring statements, concepts, and words related to the meaning and impact of the experience. Relevant statements were clustered into themes, relationships between themes were explored, and verbatim quotes from the data were identified to create a rich structural description reflecting the core meaning of the building capacity process.

Results

A total of 185 occupational therapy practitioners completed the building capacity process from 2011 to 2015. Of this total, only 117 practitioners who were present during the final face-to-face sessions completed the post-survey and written reflections. Of this group, 78% were occupational therapists and 22% were occupational therapy assistants, with an overall range of 1 to >30 yr experience.

Pretest–Posttest Results

As noted, 117 occupational therapy practitioners completed both pretest and posttest. Frequency data reported in Table 1 indicate that most of the participants (89.7%–99.9%) agreed or strongly agreed with the knowledge, beliefs, and action statements related to applying a public health approach to mental health as compared with pretest data. In addition, the matched-pairs t test revealed statistically significant improvements from pretest to posttest in all content areas ($p < .00$ or $p < .02$).

Qualitative Findings

Written documents from the first online discussion posts (185 participants) and final reflections (117 participants) were compiled and analyzed. On the basis of this combined analysis, the following four major themes reflecting the meaning and impact of the building capacity process emerged from the data.

The Building Capacity Process Was Both Meaningful and Enjoyable. Participants consistently described the process of reading, reflecting, and sharing among colleagues over a long period of time as meaningful and

Table 1. Pretest–Posttest Survey: Practitioner Perceptions of Knowledge, Beliefs, and Actions Related to Children's Mental Health ($N = 117$)

	Strongly Disagree or Disagree, %		Neutral, %		Strongly Agree or Agree, %		
Content Area (Survey Item Nos.)	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	p
Knowledge							
I am knowledgeable about a public health approach to MH: positive mental health; MH promotion, prevention, and intervention; positive psychology (1, 2, 4, 5)	18.75	0.22	25.65	0	55.60	99.97	<.00
I am knowledgeable about OT services at Tiers 1, 2 and 3: what is provided and whom we serve at tiers (6, 7, 8, 19)	57.24	0	24.62	9.07	18.14	90.93	<.00
I am knowledgeable about children at risk of or diagnosed with mental illness (15, 17)	7.96	0	10.62	0.44	81.14	99.56	<.00
I am knowledgeable about relevant frames of reference: SEL, PBIS (11, 13)	51.33	0.88	20.35	7.96	45.13	91.59	<.00
Beliefs							
I do *not* have the knowledge or time to address children's MH; addressing children's MH is beyond OT's scope of practice[a] (9, 10, 18)	78.10	85.01	13.54	6.63	08.36	08.36	.02
It is feasible for me to address the MH needs of children in school practice (3)	12.82	0.85	29.06	9.40	58.77	89.74	<.00
Other personnel and parents are aware of OT's role related to mental health (20)	85.71	58.92	11.61	29.46	2.68	11.60	<.00
Action							
I am able to articulate OT's role related to MH and full scope of practice including leisure (12, 14)	15.86	0	26.43	4.41	57.71	95.59	<.00
I address the MH needs of students I work with in everyday practice (16)	6.14	0	35.09	5.26	58.77	94.74	<.00

Note. MH = mental health; OT = occupational therapy/occupational therapist; PBIS = positive behavioral interventions and supports; SEL = social and emotional learning.
[a]Negatively worded statements.

enjoyable. The book was described as easy to read, full of resources, and "one of the most helpful and informative books I have read in years." Some participants, although initially intimidated about reading an entire book, became "hooked on the reading," as noted in the statement "The first chapter of the book was difficult to process, and I think that was because I had not picked up a textbook in years. After getting through that chapter, I found it easy to read the others and was actually hooked on the reading and all of the extra resources included." Another commented, "The book has actually changed what I do on a daily basis."

Many participants viewed the combination of reading and online discussions as effective in promoting practice reflection and enhanced learning. Participants noted, "This process has made me think about what I am doing with my students and why . . . to think about the whole child and not just handwriting and academics" and "I have been challenged to relook at how I represent [occupational therapy] in my current school setting."

Participants also described the face-to-face and online interaction with their peers as beneficial in diminishing feelings of isolation in practice and enhancing collaboration and shared learning. One therapist noted, "We rarely get to speak to one another, so it is nice to hear what other occupational therapists are doing and what resources are out there." Participants valued the CoP as a supportive network for ensuring implementation of the new knowledge. Finally, participants recognized the importance of immediate application of information as well as learning over time, as noted by one practitioner: "This ongoing continuing education experience has been more meaningful to me than a 1- or 2-day course." Another stated, "The immediate practical application and the opportunity for dialogue were wonderful."

New Knowledge Regarding Mental Health Resulted in a Change in Thinking. Early reflections in the first online discussion indicated that the information shared at the first face-to-face session along with the reading resulted in a change in thinking—namely, reframing the words *mental health* as a positive state of functioning, resulting in practice changes. One participant wrote,

> Almost immediately following our first meeting, I started reframing mental illness to a mental health continuum in my mind . . . and with this reframing to include mental *health,* our opportunities in the school system and community are numerous. My change in practice since our first meeting has been to actively and unashamedly promote joyful activity engagement.

Another therapist noted,

> I have really been making a paradigm shift to the understanding of "mental health" being more than the absence of "mental illness" and have been more aware of the different ways I address mental health, making sure that I label it as *mental health promotion.*

Participants' final reflections also conveyed their new understanding of the words *mental health* and commitment to mental health promotion. One therapist stated,

> Being a part of this experience has really opened my eyes to the meaning of the words *mental health.* It has revealed to me the deep need for not only having a strong knowledge base in this area, but also being an advocate for promoting overall mental wellness in our children.

By focusing more on mental health promotion instead of a student's skill deficits, therapists described being more tuned in to children's feelings, focusing on strengths, and fostering participation in enjoyable occupations.

Learning about the multitiered approach to mental health expanded practitioners' views of practice beyond a caseload model, as noted in this statement:

> I think this experience has helped me be more confident about expanding my practice to students who are not on my caseload. I have now been reaching out to students, primarily ones who are Tier 1 and 2, to help them successfully navigate the school experience.

Others identified plans for implementing universal, whole-school programs such as the Comfortable Cafeteria.

The Experience Evoked Strong Emotions Regarding Participants' Occupational Therapy Identity. When asked to share the meaning of participation in the building capacity process, participants expressed strong emotions with words and phrases such as *elated, inspired, reignited, powerful,* and *eye-opening and reenergizing* about being reconnected to their occupational therapy roots in mental health and occupation-based practice. Therapists stated, "I am elated to have information regarding what I feel is the basis of our profession. Mental health!" and "This experience has renewed my [occupational therapy] spirit to remember that [occupational therapy] *does* have a larger role in mental health promotion and prevention."

In addition to feeling reconnected to occupational therapy's mental health roots, many participants acknowledged becoming more aware of the full scope of occupational therapy practice (including social participation, play, and leisure) and skill sets (ability to run groups). One participant noted, "I am now more aware than ever of the huge need for services in areas I had not fully realized, including leisure coaching and promoting participation during lunch and recess, which I previously overlooked."

Changes in Practice Occurred. Greater confidence empowered practitioners to actively advocate for and

address mental health in big and small ways. Participants uniformly expressed how this experience helped them become more confident about occupational therapy's role in mental health, which, in turn, empowered them to make changes in how they talk about, advocate for, and provide occupational therapy services. For some practitioners, confidence was needed to articulate and advocate for occupational therapy's role with other mental health providers: "This process has made me more confident in my role in addressing mental health, where before I felt I had to refer situations to the counselor. Now, the counselor and I work as a team" and "When I first started this experience, the school counselor told me this was not an [occupational therapy] area. Now, I know it is and can explain why." Other therapists indicated being more confident in talking about mental health with interdisciplinary team members and parents, as reflected in this statement: "I have become an advocate for promoting overall mental wellness in children . . . and open up more conversations with building/district administration, guidance counselors, teachers, and parents."

Participants also noted how they became empowered to actively change practice in big and small ways. One capacity therapist noted, "This process has invigorated me! I feel empowered to do more, create more, share more, and educate others about our role in the schools and beyond" and "to be a therapist who is not afraid to try new things and to make changes not only in my clients' mental health, but hopefully in the way [occupational therapy] provides services." Participants shared specific methods for embedding mental health strategies into everyday practice and making every moment count, such as "Every moment does count . . . every day I try to think of the whole life experience for students—motivation, joy, to see happiness and know their value as a part of mental health." Another stated, "I'm taking the time to ask students how they are doing versus just being concerned with meeting [individualized education program] goals."

Other therapists described making larger changes in practice by joining schoolwide initiatives and implementing new programs. One noted,

> I've made bigger changes by getting more involved in PBIS [positive behavioral interventions and supports] and SEL [social and emotional learning] in my school . . . and am excited about implementing the cafeteria and recess programs in two charter schools before providing them in a huge school.

Another therapist described planning and implementing a year-long mental health promotion initiative leading up to a Mental Health Awareness week:

> We are having a Mental Health Fair in May using the 10 Actions for Happiness. We have presented the 10 Great Dream ideas at 10 staff meetings and labeled them "Mental Health Moments." For our fair . . . we have partnered with the graphic arts class to make fliers. . . . This experience has given me a framework to educate and collaborate with coworkers.

Discussion

This mixed-methods study sought to shed light on KT by exploring the meaning and outcomes of a building capacity process involving reading, reflection, and online discussion designed to promote the application of a public health approach to mental health with children and youths in occupational therapy practice. Pretest–posttest results addressed the first research question and indicate statistically significant improvements in practitioners' perceived knowledge, beliefs, and action regarding a public health approach to mental health after participation in the building capacity process. The most significant changes in knowledge occurred in the content cluster "I am knowledgeable about [occupational therapy] services at Tiers 1, 2 and 3"; only 18% agreed or strongly agreed at pretest; whereas >90% agreed at posttest. Also, almost all of the participants (>99%) indicated that they were knowledgeable about a public health approach to mental health and children at risk of or diagnosed with a mental illness at posttest.

Although not as remarkable, the most significant change in beliefs from pretest to posttest occurred in the area related to feeling that it is feasible "to address the mental health needs of children in school practice," with 59% agreeing or strongly agreeing at pretest and 90% agreeing at posttest. Regarding action, roughly 96% of participants indicated being able to "articulate occupational therapy's role related to mental health" and "address the mental needs of students" at posttest compared with 58% at pretest. These results support previous research recommending the use of strategic and multifaceted professional development activities occurring over time to enhance practitioners' knowledge and skills (Cahill, Egan, Wallingford, Huber-Lee, & Dess-McGuire, 2015). Results also confirmed that best practices associated with KT (Barwick et al., 2009; Korthagen, 2005) specifically implemented in the building capacity process were effective in enhancing knowledge, beliefs, and actions in this sample of practitioners. In particular, findings support the importance of integrated KT—the close, bidirectional relationship between researcher and practitioner (CIHR, 2014).

Qualitative findings address the second research question regarding the meaning of participation and perceived practice outcomes of the building capacity process. Because of the inductive nature of qualitative inquiry, analysis of the written reflections added specificity, depth, and unanticipated meaning to the experience. First, similar to the pretest–posttest results, participants described gaining new knowledge about mental health and a public health approach to mental health. However, participant reflections extended survey findings in two specific ways. One consistent finding was that practitioners reframed their thinking about the words *mental health* from a focus on mental illness to a positive state of functioning. Expressed as almost an "aha" moment, practitioners voiced excitement about this thought, describing strategies to consciously promote positive mental health during everyday practice.

In addition to gaining an understanding of a multitiered approach to mental health, participants recognized and described how application of this model expanded thinking about whom they serve to include Tier 1 and Tier 2 children not on their caseload (e.g., implementing whole-school approaches focusing on mental health promotion and prevention such as the Comfortable Cafeteria program). Embedding services within a multitiered model has also been advocated for with the Response to Intervention framework (Cahill, McGuire, Krumdick, & Lee, 2014). Furthermore, a shift in services to a whole-school health promotion model that fosters successful participation for all students has also been supported as an effective services delivery model in the Partnering for Change initiative for children with developmental coordination disorder (Missiuna et al., 2012).

Second, reflections on the building capacity process evoked strong, positive emotions regarding being reconnected to occupational therapy's roots in mental health, using words such as *elated, renewed,* and *reenergized.* Until recently, publications specifically describing and applying a mental health promotion, prevention, and intervention framework to occupational therapy practice with children and youths in various practice settings were unavailable (Bazyk, 2011). Systematically engaging practitioners in reading publications designed to filter EBP and new knowledge through an occupation-focused lens (Cramm et al., 2013) has been recommended. Our findings suggest that for these participants, obtaining current knowledge and practical resources about how to specifically address the mental health needs of children and youths in a variety of settings was particularly liberating.

Third, consistent with the pretest–posttest results, participants indicated that the building capacity process resulted in action, specifically changes in practice. Practitioners uniformly indicated that the experience helped them become more confident about occupational therapy's role in addressing children's mental health. This finding is consistent with other studies that have noted enhanced confidence after focused professional development activities (Cahill et al., 2015; Thomas & Law, 2013). Our findings suggest that the combination of increased knowledge, renewed energy, and confidence resulted in occupational therapy change leaders—practitioners empowered to change practice on the basis of current knowledge and research. Practitioners described being more articulate in advocating for and describing occupational therapy's role in addressing children's mental health to other school providers and parents, even when challenged by mental health providers.

The need for practitioners to have a framework and language for describing occupational therapy's role in mental health was identified as essential to ensuring that such efforts do not remain hidden (Nielsen & Hektner, 2014). Practitioners also provided detailed examples of how they embedded mental health promotion strategies in everyday practice in small ways (e.g., tuning into feelings, promoting positive interactions) and in more substantial ways (e.g., planning and implementing a year-long mental health promotion initiative in the school). Such examples of practice change suggest that the building capacity process yielded practical knowledge and practice innovation, "creating new visions of what can be accomplished in practice" (Kielhofner, 2005, p. 235).

Last, qualitative findings provided insight into the meaning of the building capacity process from the participants' perspective. The experience was repeatedly described as both meaningful and enjoyable. Designing professional development experiences to foster participant enjoyment may be an important factor in ensuring feelings of emotional well-being during the process and continued participation (Fredrickson, 2001). In addition, participants found the assigned book informative, easy to read, and full of excellent resources, leading some to become "hooked on the reading." This book was intentionally selected because it provides a synthesis of current literature on the subject as well as direct and practical application to occupational therapy practice without being overly technical. The importance of providing the just-right level of challenge in professional development has been recommended (Cahill et al., 2015). Finally, participants noted the importance of shared learning and support within a community of occupational therapy practitioners, confirming the use of CoPs as a mechanism for enhancing KT (Barwick et al., 2009).

Limitations

Although the results of this mixed-methods study are strengthened by its combination of quantitative and qualitative inquiry, a limitation is that without the use of a control group, we are unable to infer causality, that is, that the intervention was responsible for the documented outcomes.

Implications for Occupational Therapy Practice

To help reduce the time it takes to apply new knowledge and research to practice, the building capacity process introduced in this study can serve as a model for promoting KT in other practice areas to develop occupational therapy leaders empowered to change practice on the basis of current knowledge and evidence within an occupation-based perspective. Specifically, this process is recommended to involve

- A dynamic, bidirectional relationship between practitioners and researchers that values both research and practice knowledge
- A variety of learning strategies including reading, reflection, and face-to-face and online discussions that occur over time within a CoP
- The use of readings that synthesize and apply research within an occupational therapy framework and that provide practical strategies and resources for implementation.

Conclusion

On the basis of the need for KT models within occupational therapy (Metzler & Metz, 2010), the building capacity process was developed, implemented, and examined to translate knowledge about a public health approach to mental health with children and youth in occupational therapy practice. Participants enjoyed and found meaning in the building capacity process, which involved reading, reflecting, and sharing within a community of practitioners. New knowledge on how to address children's mental health in a variety of settings evoked strong emotions regarding being reconnected with occupational therapy's roots. Expanded knowledge coupled with renewed energy resulted in feelings of confidence and being empowered to articulate, advocate for, and implement practice changes reflecting occupational therapy's role in addressing children's mental health in everyday practice. ▲

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Dedication

This work is dedicated to the memory of Jane Case-Smith for her assistance in developing the Central Ohio CoP in 2012 and for her endless devotion to EBP and KT in pediatric occupational therapy.

References

Arbesman, M., Bazyk, S., & Nochajski, S. M. (2013). Systematic review of occupational therapy and mental health promotion, prevention, and intervention for children and youth. *American Journal of Occupational Therapy, 67,* e120–e130. http://dx.doi.org/10.5014/ajot.2013.008359

Barry, M. M., & Jenkins, R. (2007). *Implementing mental health promotion.* Edinburgh, Scotland: Churchill Livingstone.

Barwick, M. A., Peters, J., & Boydell, K. (2009). Getting to uptake: Do communities of practice support the implementation of evidence-based practice? *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 18,* 16–29.

Bazyk, S. (Ed.). (2011). *Mental health promotion, prevention, and intervention with children and youth: A guiding framework for occupational therapy.* Bethesda, MD: AOTA Press.

Bazyk, S. (2013). Best practices in supporting mental health: Promotion, prevention and intensive services. In G. Frolek Clark & B. Chandler (Eds.), *Best practice in school occupational therapy* (pp. 195–207). Bethesda, MD: AOTA Press.

Bazyk, S., & Arbesman, M. (2013). *Occupational therapy practice guidelines for mental health promotion, prevention, and intervention for children and youth*. Bethesda, MD: AOTA Press.

Cahill, S. M., Egan, B. E., Wallingford, M., Huber-Lee, C., & Dess-McGuire, M. (2015). Results of a school-based evidence-based practice initiative. *American Journal of Occupational Therapy, 69*, 6902220010. http://dx.doi.org/10.5014/ajot.2015.014597

Cahill, S. M., McGuire, B., Krumdick, N. D., & Lee, M. M. (2014). National survey of occupational therapy practitioners' involvement in response to intervention. *American Journal of Occupational Therapy, 68,* e234–e240. http://dx.doi.org/10.5014/ajot.2014.010116

Canadian Institutes of Health Research. (2004). *Innovation in action: Knowledge translation strategy (2004–2009).* Retrieved from http://www.cihr-irsc.gc.ca/e/documents/kt_strategy_2004-2009_e.pdf

Canadian Institutes of Health Research. (2014). *More about knowledge translation at CIHR.* Retrieved from http://www.cihr-irsc.gc.ca/e/39033.html#Two-Types-2

Cramm, H., White, C., & Krupa, T. (2013). The Issue Is—From periphery to player: Strategically positioning occupational therapy within the knowledge translation landscape. *American Journal of Occupational Therapy, 67,* 119–125. http://dx.doi.org/10.5014/ajot.2013.005678

Csikszentmihalyi, M. (1993). Activity and happiness: Towards a science of occupation. *Journal of Occupational Science, 1,* 38–42. http://dx.doi.org/10.1080/14427591.1993.9686377

Denscombe, M. (2008). Communities of practice: A research paradigm for the mixed methods approach. *Journal of Mixed Methods Research, 2,* 270–283. http://dx.doi.org/10.1177/1558689808316807

Donaldson, S. I., Csikszentmihalyi, M., & Nakamura, J. (Eds.). (2011). *Applied positive psychology: Improving everyday life, health, schools, work, and society.* London: Routledge.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56,* 218–226. http://dx.doi.org/10.1037/0003-066X.56.3.218

Gutman, S. A., & Raphael-Greenfield, E. I. (2014). Five years of mental health research in the *American Journal of Occupational Therapy,* 2009–2013. *American Journal of Occupational Therapy, 68,* e21–e36. http://dx.doi.org/10.5014/ajot.2014.010249

Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist, 62,* 95–108. http://dx.doi.org/10.1037/0003-066X.62.2.95

Kielhofner, G. (2005). A scholarship of practice: Creating discourse between theory, research and practice. *Occupational Therapy in Health Care, 19,* 7–16. http://dx.doi.org/10.1080/J003v19n01_02

Korthagen, F. (2005). The organization in balance: Reflection and intuition as complementary processes. *Management Learning, 36,* 371–387. http://dx.doi.org/10.1177/1350507605055352

Lencucha, R., Kothari, A., & Rouse, M. J. (2007). The Issue Is—Knowledge translation: A concept for occupational therapy. *American Journal of Occupational Therapy, 61,* 593–596. http://dx.doi.org/10.5014/ajot.61.5.593

Lockyer, J., Gondocz, S. T., & Thivierge, R. L. (2004). Knowledge translation: The role and place of practice reflection. *Journal of Continuing Education in the Health Professions, 24,* 50–56. http://dx.doi.org/10.1002/chp.1340240108

Metzler, M. J., & Metz, G. A. (2010). Translating knowledge to practice: An occupational therapy perspective. *Australian Occupational Therapy Journal, 57,* 373–379. http://dx.doi.org/10.1111/j.1440-1630.2010.00873.x

Meyer, A. (1922). The philosophy of occupational therapy. *Archives of Occupational Therapy, 1,* 1–10.

Miles, J., Espiritu, R. C., Horen, N., Sebian, J., & Waetzig, E. (2010). *A public health approach to children's mental health: A conceptual framework.* Washington, DC: Georgetown University Center for Child and Human Development, National Technical Assistance Center for Children's Mental Health.

Missiuna, C. A., Pollock, N. A., Levac, D. E., Campbell, W. N., Whalen, S. D., Bennett, S. M., . . . Russell, D. J. (2012). Partnering for change: An innovative school-based occupational therapy service delivery model for children with developmental coordination disorder. *Canadian Journal of Occupational Therapy, 79,* 41–50. http://dx.doi.org/10.2182/cjot.2012.79.1.6

Nielsen, S. K., & Hektner, J. M. (2014). Understanding the psychosocial knowledge and attitudes of school-based occupational therapists. *Journal of Occupational Therapy, Schools, and Early Intervention, 7,* 136–150. http://dx.doi.org/10.1080/19411243.2014.930615

Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. *Advances in Health Sciences Education: Theory and Practice, 15,* 625–632. http://dx.doi.org/10.1007/s10459-010-9222-y

Patton, M. Q. (2002). *Qualitative research and evaluation* (3rd ed.). Thousand Oaks, CA: Sage.

Polkinghorne, D. E. (1989). Phenomenological research methods. In R. S. Valle & S. Halling (Eds.), *Existential–phenomenological perspectives in psychology* (pp. 41–60). New York: Plenum.

Straus, S. E., Tetroe, J., & Graham, I. D. (Eds.). (2009). *Knowledge translation in health care: Moving from evidence to practice.* Hoboken, NJ: Wiley-Blackwell. http://dx.doi.org/10.1002/9781444311747

Thomas, A., & Law, M. (2013). Research utilization and evidence-based practice in occupational therapy: A scoping study. *American Journal of Occupational Therapy, 67,* e55–e65. http://dx.doi.org/10.5014/ajot.2013.006395

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge.* Boston: Harvard Business School Press.

Westfall, J. M., Mold, J., & Fagnan, L. (2007). Practice-based research—"Blue Highways" on the NIH roadmap. *JAMA, 297,* 403–406. http://dx.doi.org/10.1001/jama.297.4.403

World Health Organization. (2001). *The World Health report: Mental health: New understanding, new hope.* Geneva: Author.