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The development of a needs assessment of pediatric occupational therapists: learning needs for competency in mainland China

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Doctoral Project

**THE DEVELOPMENT OF A NEEDS ASSESSMENT
OF PEDIATRIC OCCUPATIONAL THERAPISTS:
LEARNING NEEDS FOR COMPETENCY IN MAINLAND CHINA**

by

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DEDICATION

I dedicate this doctoral project to the three wise-men that inspired the joy of journeying far and near in my life.

Anthony J. Skees is my first wise man who taught me that doing for others is the greatest gift we can receive. Tony (or Dad to me) was a man that tried to live his life following his family legacy of traditions and hard work from his days at the old home-place. He was one of the first groups of Air Force cadet pilots after WWII, and never lost his love for navigating through the clouds.

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ABSTRACT

The growth and learning needs of pediatric occupational therapists working in the People's Republic of China (PRC) have not been fully researched or documented at this time. Without a formal occupational therapy association, the communication and planning to identify these professional development needs can be challenging. WFOT resources available for non-member countries combine with some of the traditional occupational therapy resources and initiatives from neighboring member associations. Hong Kong and Taiwan provide practices and materials that reflect Chinese culture and assist in promoting the profession (Lin, 2014; Sinclair, 2015). Language nuances, historical and political issues can make direct transference to the mainland of China problematic. These activities help support occupational therapy as a distinct healthcare profession within these regions of the PRC but may have barriers to direct application in mainland China. A formal needs assessment of the occupational therapists has not yet been undertaken.

The steps to develop a pediatric needs assessment are presented in this paper. Research confirms a facilitated needs assessment can assist in determining and

understanding learning needs, preferences, patterns, and future topics (Newcomer, Hatry, & Wholey, 2015) for occupational therapists and the groups that provide them professional development training in mainland China. There are three distinct stakeholder groups identified for this research project: pediatric occupational therapists, professional development producers, and families of children receiving therapy services in mainland China. The research team works collaboratively with identified stakeholder partners to identify the training and growth needs of the pediatric occupational therapist to provide the required educational recommendations that will foster competency in practice.

Both the occupational therapists and the providers of professional development activities gain a better understanding through participation in the program evaluation processes of surveying learning needs in the context of international evidence-based competency content. The implementation and dissemination of the program verifies, validates and provides a synthesis of perspectives and establishes a connection for the client's input to the therapy services. The program evaluation summary recommendations are hypothesized to have an impact on improving the perception of the quality of pediatric occupational therapy services received by caregivers and families in mainland China.

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LIST OF ABBREVIATIONS

AOTA American Occupational Therapy Association
CARM Chinese Association of Rehabilitation Medicine
CBR Community Based Rehabilitation
CDFP Chinese Federation for Disabled Persons
KtA Knowledge-to-Action Theory
OT Occupational Therapy or Occupational Therapists
PRC People's Republic of China
WFOT World Federation of Occupational Therapists
WHO World Health Organization

GLOSSARY

Term	Definition
Attitudes	Refers to an individual’s perspective on topics that determines how one feels about a topic and how one behaves in relation to the topic.
Clinical reasoning	A term used describing the process practitioners use to plan, direct, perform, and reflect on their client’s care.
Competence, or competent practice	“Being able to do what you are required to do in a safe and effective manner” (WFOT, 2016c, p. 68).
Context	The setting where an activity occurs.
Continuing professional development	The process by which healthcare professionals address, maintain, and update their knowledge and skills to meet the needs of patients, the health services, and their own professional development.
Cultural collectivism	Refers in this paper to the philosophies related to traditional Asian Taoism, Buddhism, and Confucius teachings that promote the good of people above the individual and family honor.
Cultural competence	A competency in the development and awareness of the client, the context and one’s own cultural assumptions, values, and beliefs.
Educational resources	Occupational therapy journals and textbooks.
Entry-level competency	Minimum level of mastery of knowledge, skills and attitude to function within a given setting to meet the regulations
Entry-level minimum standards for education	WFOT establishes the academic standards with most recent revisions published in 2016.

Expert; or advanced competencies	WFOT has specific criteria that includes being a recognized OT and accredited as required in each country and member of the national and/ or local OT association, at least 3 years of experience with at least half of that in the specialty practice area, post professional Masters, structured clinical supervision experience & professional profile.
Knowledge	Based upon WFOT terminology and refers to “the things that a person knows, and includes knowing about things and knowing how to do things” (WFOT, 2016c, p. 69).
Knowledge translation	“the collaborative and systematic review, assessment, identification, aggregation and practical application of high-quality disability and rehabilitation research by key stakeholders (i.e. consumers, researchers, practitioners, policy makers) for the purpose of improving the lives of individuals with disabilities” (National Center for Dissemination of Disability Research, 2005, p. 1)
Language translation methods	Any method to understand another language with either electronic, software or live translator.
Life-long learning	WFOT refers to this as “recognizing the need to always learn more, wanting to learn more, and having the skills to locate relevant knowledge and skills, understand and then apply them within practice” (WFOT, 2016c, p. 69).
Local context	Refers to “a geographic are, such as a whole country, state or distinct political region that has a characteristic range of health and welfare needs, cultural backgrounds and health and welfare systems” (WFOT, 2016c, p. 70).
Maintaining competency	Commitment to life-long learning for knowledge, skills and attitudes to perform required services in the context of practice.

Networking opportunities	Virtual and in-person interacting with other people to expand employment and professional knowledge.
Novice	New to a skill or knowledge area.
Occupation	WFOT definition refers to “all of the things that people do that are meaningful within their culture” (WFOT, 2016c, p. 70).
Practices	The scope and range of reasoning, skills and delivery of occupational therapy services.
Professional reasoning	Broader term than classic clinical reasoning and includes supervisory, managerial and educational perspectives related to service delivery.
Skills	WFOT defines this term as “the ability to do something, and includes skill in thinking as well as skill in physically doing something” (WFOT, 2016c, p. 71).
Sociopolitical policies	Within this paper it refers to the Chinese communist government ownership and directed control of community resources.
Technology	Refers to all devices that exchange information or communications includes computers, VPN, Wi-Fi and global website access when needed.

(AOTA, 2017; Graham et al., 2006; NCDDR, 2005; Newcomer, et al., 2015; WFOT 2008b; WFOT 2009; WFOT 2012; WFOT 2014b; WFOT 2016c)

CHAPTER 1: INTRODUCTION

The Problem and Desired Outcome

Occupational therapy is an emerging profession in mainland China, since the introduction of rehabilitation medicine in the 1980's (Sinclair & Cao, 2016). However, there are challenges to the development of occupational therapy as a sustainable, globally-connected healthcare profession throughout China (Scheidegger & Torrance-Foggin, 2015; Sinclair, 2015; Sinclair & Cao, 2016). One challenge is the small numbers of qualified instructors readily available to sustain academic programs that meet the World Federation of Occupational Therapy (WFOT) standards (Brandt et al., 2014; Hermes, Coppola, Sinclair, & Vroman, 2015; Hermes, Hu, Kuo, & Troutman, 2016; Hermes, Hu, Ow, Chong & Wang, 2014; Lim & Duque, 2011; Lin, 2011; Lin, 2014; Sinclair, 2015; Sinclair & Cao, 2016). Another is the emerging role identification of occupational therapy as a distinct profession (Hermes et al., 2016; Lin, 2011; Sinclair, 2015; Sinclair & Cao, 2016).

In China, the occupational therapy profession is currently directed primarily by rehabilitation medicine personnel, with a focus on a biomechanical approach addressing physical abilities (Lim & Duque, 2011; Lin, 2011; Lin, 2014; Sinclair, 2015; Sinclair & Cao, 2016). Content within the occupational therapy programs in China also emphasizes technical skills rather than professional clinical reasoning skills (Lin, 2011; Lin, 2014; Sinclair & Cao, 2016). Overall the focus is on remedial intervention approaches rather than evidence-based, task-oriented and client-centered approaches that are culturally relevant and support the advancement of occupational therapy practice (Lim & Duque,

2011; Lin, 2011; Lin, 2014; Sinclair & Cao, 2016). Consequently, there are limited numbers of experienced occupational therapists prepared to provide intervention to the incredibly large population, and these therapists appear to have limited access to global best practices resources.

The profession of occupational therapy is growing in China, so it is important to develop resources to support evidence-based practices. Some of the challenges to delivering best practices in China include limited access to global content due to government internet regulations, lack of infrastructure to manage the high population demand, and variability in internet users' access depending on technology support. An additional obstacle is determining a method in which to share the relevant research resources, given the variety of native languages and dialects of providers and clients in mainland China. Finally, the majority of providers have limited clinical experience. (Hermes et al., 2015; Hermes et al., 2016; Sinclair, 2014; Sinclair & Cao, 2016). Brandt et al. (2014) and Lin (2014) identified a lack of skilled knowledge for clinical reasoning skills for culturally relevant occupation-based services. All of these challenges contribute to the difficulty in providing consistent global best practice occupational therapy.

Historically rehabilitation services were provided in a hospital-based setting, which can limit the clients' skill translation into their natural environment where daily activities occur (Sinclair & Cao, 2016). In support of growing awareness of needs and services, Chinese attitudes toward disabilities are shifting. This is evidenced by the formal role the Chinese Federation for Disabled Persons (CFDP) has in the communist government policy and funding programs across the country, as well as the inclusion of

the goal of rehabilitation for all in China's 12th and 13th Five-year plans (CFDP, 2016; Hou, 2016; Sinclair & Cao, 2016). However, occupational therapists continue to provide services in mainly clinical contexts with slow emergence into alternative settings such as work re-entry, cognitive rehabilitation (Sinclair & Cao, 2016) and pediatrics (Brandt et al., 2014; Hermes et al., 2014; Hermes et al., 2016).

The Chinese government has recognized the need for having a rehabilitation workforce that meets international standards and is prepared to address the rehabilitation needs of its vast population (Sinclair & Cao, 2016). Leaders in occupational therapy have begun the tedious processes of translating relevant textbooks and assessment materials, and establishing standards of practice (Sinclair, 2015; Sinclair & Cao, 2016). Also, occupational therapy educators from the around the world are increasingly supporting the development of occupational therapy education in China through WFOT projects and academic collaborations (Fraser, 2016; Mu et al., 2010a; Mu, Coppard, Bracciano, Doll, & Matthews, 2010b; Mu et al., 2016; Sinclair & Cao, 2016). For example, Hong Kong Polytechnic University has provided staff support and faculty for training occupational therapy educators within mainland China. The Japanese Occupational Therapy Association (JOTA) also has collaborated with the Capital Medical University and the Chinese Rehabilitation Research Center (CRRC) to help develop and implement the two plus two educational model where the first two years of the curriculum are combined, and the final two years are dedicated to specific professional curriculum content (Sinclair & Cao, 2016).

Although the literature suggests evidence-based occupational therapy services are

growing in volume and scope for children in mainland China, many practitioners have unmet needs (Brandt et al., 2014; Lin, 2014; Hermes et al., 2014). Unfortunately, there is a lack of systematic research that documents their needs from their perspective. We also have a limited understanding of the perspectives of occupational therapists working in pediatrics in mainland China regarding their needs for providing competent interventions for clients seeking occupational therapy.

I propose to collaborate with the newly forming pediatric therapy organizational leaders under the Chinese Association of Rehabilitation Medicine (CARM) to conduct a formal needs assessment in order to determine the professional development needs of the occupational therapists working with children and families in China. In this doctoral project the foundation materials that includes an initial pediatric needs assessment survey will be investigated and developed. The outcome of this needs assessment would be a better understanding of therapists' perceived needs of resources and supports to enhance their professional development. This new knowledge may be used to advocate for and to develop those identified resources into support systems that address therapists' professional development.

Relevance

The World Health Organization (WHO) is the agency of the United Nations that addresses and studies health needs around the world. WHO's missions include focusing on the improvement of infrastructure for development of health services and supporting an educated and informed health workforce to provide best practice (Barrett, 2017; O'Flynn, 2015; WHO, 2017). Since 1959 the WHO and the World Federation of

Occupational Therapists (WFOT) have been collaborators in supporting international health initiatives and building capacity among policy makers and rehabilitation professionals. Members of both organizations are committed to being “proactive and responsive to emerging global health and social issues” (WFOT, 2010, p. 1) with ongoing healthcare worker continuing education.

WHO documents define health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 2017, p. 1). WFOT’s (2010) statement on occupational therapy defines the profession as one that “is concerned with promoting health and wellbeing through occupation” (p. 1) and prepares practitioners with a broad educational background in social sciences, anatomy, physiology, psychological, and occupational science. Occupational therapists view health as the ability to engage in meaningful occupations (AOTA, 2014b; Baum & Law, 1998; Doll, 2010; Wilcock, 2006). This definition emphasizes that occupational therapy focuses on health promotion and emerging health issues internationally. Both WHO and WFOT are concerned with supporting occupational therapy services to all populations, including children and families in China.

These sociopolitical factors, to some degree, impact occupational therapists who provide pediatric services to families and children. An occupational therapist’s primary goal is to enable people to participate in their activities of everyday life. They achieve this goal by collaborating with individuals and communities “to enhance their ability to engage in the occupations they want to, need to, or are expected to do, or by modifying the occupations or the environment to better support their occupational engagement”

(WFOT, 2010, p.1). Children are members of families and communities which shape their behavior and responses, and as such cannot be treated in isolation. Social or political challenges may impact a family's ability to support their child's engagement in meaningful occupations (Jaffe, Humphry, & Case-Smith, 2010; Grantham-McGregor et al., 2007).

To further distinguish the relevance of occupational therapy's role for individual clients and populations, it is important to understand occupational therapists' international academic preparation. Focusing on the health needs of a population requires occupational therapists to use a systems approach and has been referred to as community-based practice (Doll, 2010; Fazio, 2008; WFOT, 2014b; WFOT, 2016c). In community-based practice, occupational therapists use their foundation skills of activity analysis and understanding of engagement in occupation to identify mental, physical and social factors that limit participation in the desired occupation. Occupational therapists working in community practice are to "acquire new skills, fill new roles, and use a client-centered approach to treatment" (Lemorie & Paul, 2001, p. 34). Their roles expand beyond direct service to advocating, assessing unmet health needs, promoting inclusion, program development, and building community capacity (Doll, 2010; Tupe, Kern, Salvant & Talero, 2015; WFOT, 2014b; WFOT, 2016c). The community-based approach may be necessary for a country where occupational therapy is a developing profession as clinicians have to be prepared to apply a systems level approach to their evolving professional role identity and be adaptable to their service delivery skills and settings.

Both WHO and WFOT are conscious of the larger systems of social and political decisions that affect the health of communities and entire countries. In some countries where health care systems are in transition, health disparities are created by social and political factors. These disparities may be related to funding barriers, travel challenges, and unequal treatment. Sociopolitical policies also can restrict an individual's or community's ability to respond to healthcare opportunities in their daily lives (Farmer, 2003). Occupational therapists need to view health care through the lens of the client's social and political influences in order to facilitate effective changes in health promotion behaviors.

Using the lens of the WFOT organization, there are several recommendations for member and non-member countries to support high quality occupational therapy services (WFOT). WFOT recommendations include the initial stage of defining a culturally relevant occupational therapy professional identity within a given country, and extends to maintaining and developing occupational therapy services within the context of delivery in established WFOT member settings (WFOT, 2008a; WFOT, 2014a). The WFOT Guiding Principles on Diversity and Culture document emphasizes the need for practices and research to fully capture and reflect the "experiences and narratives of the population" (WFOT, 2009, p. 20). "Cultural competence" requires developing awareness of the client's perspective, the context and one's cultural assumptions, values, and beliefs (Odawara, 2005).

Since the onset of open door social, political shifts implemented during Deng Xiaoping's leadership in China during the 1980's, there have been healthcare reforms and

more support for rehabilitation. During this time, the WHO has advocated for rehabilitation services to shift towards community-based rehabilitation (CBR) in community settings (Blumenthal & Hsiao, 2015; LeDue, Parekh, Zhang, & Zhou 2012; Lim & Duque, 2011; Purvis, 2000; Zheng, et al., 2011). CBR's are designed to use onsite healthcare personnel, existing community structures, and resources, and when indicated, referral to experts for complicated problems. Occupational therapists are part of this pool of experts and have a unique skill set to engage in proactive community health initiatives. Occupational therapy scholars recognize that "staying within the medical model deprives society of the full benefits of an occupational approach" (Miller & Nelson, 2004, p. 138). The shift to community-based settings may ease travel and financial costs for both families and occupational therapists providing the various client-centered pediatric services currently in China. For example, both families and therapists would not have the financial burdens of travel or extended stays related to traditional hospital interventions.

Occupational therapists have established expertise in promoting children's play and functional performance, focusing on children's interactions, occupations, and environments and emphasizing family-centered care (Jaffe, Humphry, & Case-Smith, 2010; Rodger & Ziviani, 2006). As occupational therapy services for children and youth evolve in China, a few authors of both Western and Eastern heritage advocate for blending Western-influenced theory, academic content, and available technology with relevant Chinese lifestyle and culture (Brandt, et al., 2014; Lin, 2014; Zhou, 2006,). The cultural relevance and ease of application of more western influenced pediatric

assessments and intervention need to be translated to address the traditional Chinese cultural values and practices. The available literature does not directly confirm the need for a blending of Western approaches to Chinese lifestyle and culture among occupational therapists working in pediatrics in China. Consequently, it would be useful to understand practitioners' perspectives on their professional development needs.

The WHO and the WFOT statements on occupational therapy support the need for the occupational therapists working in pediatrics within China to be proactive in addressing the social and health needs of individuals and populations by using evidence-based practices. The families do not have access to community-based occupational therapy providers and have limited time and financial resources. Studies document that without access to health care, higher incidence of health problems, childhood delays, and increased poverty persist (Grantham-McGregor et al., 2007). Therefore, therapists must provide the most effective interventions that are culturally sensitive to achieve optimal outcomes for children and families. Understanding the professional development needs of pediatric occupational therapists in China may guide professional development programs to prepare practitioners ultimately to meet the needs of children and families.

Causes

There is not enough evidence to determine if occupational therapists working in China with children have unmet needs; however, there are factors that appear to significantly influence the development of occupational therapy within the People's Republic of China. These factors include a national and regional government socio-political policies that impact healthcare access and resource allocation, particularly for

therapists working in rural settings, cultural collectivism, language barriers, and limited access to technology. Government controlled media and internet communications limit access to and the opportunity for families and health care workers to search and connect with global resources that may be perceived to be in conflict with some eastern philosophies and approaches to pediatric healthcare information (Doe, 2015). Language barriers and cultural relevance of western theory and interventions are factors that are difficult to overcome. The sheer volume of pediatric content to prioritize for translation into printed Chinese characters is daunting. Furthermore, these resources will need to be evaluated for application within multi-generational Chinese lifestyle and values. Finally, the cost of purchasing the technology to link to the internet without restrictions and to have a supported signal (either wirelessly or through Ethernet) are often not viable for occupational therapists working in more remote locations of China.

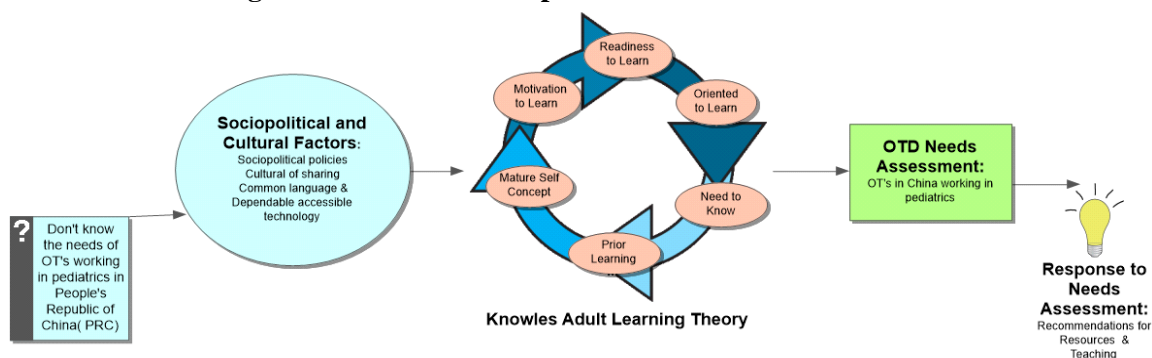
Proposed Solution

The proposed solution is to develop a needs assessment survey with culturally relevant, focused questions to determine the learning needs of the occupational therapists working with children and families in mainland China. Having this information will help to provide competent pediatric occupational therapy services based upon WFOT recommendations for best practice knowledge and clinical reasoning skill. This author will use a literature review to guide the process in developing an evidence-based needs assessment that gathers meaningful intrinsic information informing the occupational therapy participants of best practice trends and aiding professional development stakeholders in planning for future offerings. A survey designed with these aims in mind

can best match the preferences of the occupational therapists working with children and families in mainland China with the key stakeholders that want to support the transition process along the career life-long learning path. In this way, it will also increase the number of knowledgeable and skilled occupational therapists providing services in pediatrics in mainland China.

CHAPTER 2: THEORETICAL AND EVIDENCE BASE TO SUPPORT THE PROJECT

Figure 2.1 Theoretical Explanation Model of the Problem



The model above provides a visual representation of the problem this doctoral project proposes to address. We do not have a clear understanding of the perspectives of occupational therapists working in pediatrics in mainland China regarding their needs to provide competent interventions for clients seeking occupational therapy in their geographic areas. Four factors, specific to occupational therapy practice in mainland China, may facilitate or impede occupational therapists' ability to provide best practice in pediatrics. These factors are sociopolitical policies, a culture of sharing, common language, and dependable access to technology. To explore these issues, we will need to consider the potential of a western perspective bias.

Theory to Understand the Problem

Knowles' theory of adult learning (andragogy) provides a conceptual framework for understanding the needs of adult learners (Caruthers, 2014; Merriam, 2001). Andragogy can be defined as "the art and science of helping adults learn" (Knowles, 1980, p 43). The six basic assumptions of andragogy are that adults have: need to know;

an established self-concept; a readiness to learn; a learning orientation, bringing prior learning experiences; and are motivated to learn. The emphasis of Knowles' theory was to understand adult learners better to improve their capacity for inquiry and to become lifelong learners. Knowles revised his original thinking on adult learning that suggested pedagogy to andragogy was age specific. He proposed instead that it was a continuum of learning from teacher-directed to student-directed, depending on the learning situation. This continuum recognizes that some adults with specific life experiences may still tend to be dependent learners and need external supports (Merriam, 2001). Although there has been some criticism of Knowles work reflecting primarily western views, it has been applied in international education in China (Wang, 2008; Wang, 2014; Wang & Farmer, 2008; Wang & Kreysa, 2006; Ryan & Slethaug, 2010; Watkins & Biggs, 2005).

For all adult learners, no matter the country of origin, they will bring a collection of life experience that will be a foundation for additional learning and influence new learning interpretations. According to Knowles, readiness and motivation to learn is based on having a mature self-concept in which the individual is intrinsically driven to life-long learning. The adult learner seeks out learning experiences that are relevant to the individual. This notation of a mature self-concept is based upon individualism and may be in conflict with collectivism ideas influencing the Chinese culture. To address the limited understanding of the learning needs of occupational therapists currently providing services in pediatrics in the People's Republic of China (PRC), a formal needs assessment of the therapists will be conducted. This facilitated process aims to help professional development stakeholders understand the therapists' perspectives regarding

their strengths and challenges related to best practice for children and youth in order to formulate the most prudent educational response.

As adult learners, there are key principles put forth by andragogy. Adults (therapists) need to be involved to self-generate and evaluate their professional development plans. Their experiences will provide the ongoing learning with both mistakes and successes. Adults need their learning to be relevant to their current life experiences, job, and roles. They tend to be problem-centered, instead of content-focused (Knowles, 1980). Also, Knowles suggests that adults want to apply new learning immediately (Merriam, 2001). As adults working in China, government policies, cultural collectivism, language barriers, and technology limitations all have the potential to impact therapist's jobs and roles. These factors potentially influence the therapists' learning needs. The healthcare working environment is rapidly changing and evolving. This process of change has the potential to influence therapists' perception of their learning needs.

Sociopolitical policies may create obstacles for delivery of OT best practice and impact the therapists' learning needs. The narrow scope of government policies supporting families of children with disabilities may restrict the options a therapist pursues to address a meaningful client goal for a child. The limited funding resources for individuals with disabilities raises the financial burden for the families and creates social pressures on the therapist to find frugal and rapid results-oriented interventions. Although efforts have been in place to shift healthcare from an urban institutional setting to the World Health Organization (WHO) advocated community- based rehabilitation

model (CBR); low salaries and under-capitalized community resources impede this initiative (Blumental & Hsiao, 2015). In the rapidly evolving rehabilitation healthcare market in China, there remain limited numbers of therapists to meet the growing client base which provides fewer opportunities for novice therapists to observe experienced therapist in rural areas (Brandt, et al., 2014; Scheidegger & Torrance-Foggin, 2015; Zhou, 2006).

Occupational Therapy in China

Occupational therapy in China has many influences. Education programs have been the first target, as they are expanding exponentially since the first WFOT program was recognized in 2011 (Lin, 2014). Occupational therapy services are slowly stepping out from the more traditional hospital-based service. And efforts are underway to help diversify the current government sanctioned rehabilitation therapists' position to add acknowledgement of other internationally recognized professions (e.g., occupational therapy, physical therapy, and speech therapy) throughout China. These key stakeholders have impact on the advancement and development of occupational therapy as a stand-alone profession. Some are aimed at the occupational therapists' needs working directly in the PRC combined with the immersion learning opportunities for the visiting occupational therapy students that are based in Western occupational therapy academic programs. These foreign driven initiatives may be problematic to sustain occupational therapy within the PRC with local Chinese occupational therapy leadership activities or efforts because of the differences in the country culture or language barriers (Sinclair, 2015).

Collaborative western and eastern occupational therapy academic initiatives have been launched in the past decade (Sinclair, 2015; Sinclair & Cao, 2016; Yan, Sinclair & Penman, 2012). Partnerships have emerged to support the development of both occupational therapy curriculum and professional development. Several USA-based occupational therapy academic collaborations exist and three located in the literature will be introduced next.

The University of Southern California (USC) Chan Endowment that supports occupational therapy in China is one (AOTA, 2014). Another is the ongoing Creighton University China Honors Immersion Program, C.H.I.P. for multidiscipline student exchange (Frasier, 2013; Mu et al., 2010; Mu et al., 2016). The long-running Pacific University Occupational Therapy Innovative Practice Projects (IPP) OTD group topics in China is another supportive collaborative initiative (Brandt et al., 2014; Schack, Halverson, Chau & Woolfe, 2012).

There are several Asian-based initiatives as well. Sinclair and Cao (2017) detail Japan's involvement dating back to 2001 with the support and cooperation of the Japanese International Cooperation Agency (JICA) and the Japanese Association of Occupational Therapy (JAOT), in conjunction with Capital Medical University and the Chinese Rehabilitation Research Center (CRRC) to support the 2 plus 2 education program design in rehabilitation. This allows for two years of common therapy curriculum and two years of focused professional specialization in curriculum design. The Hong Kong Society of Rehabilitation (HKSR) and Hong Kong Polytechnic University have participated in train the trainer education initiatives and sponsoring

bilingual educators in occupational therapy curriculum settings (Hermes et al., 2015; Sinclair & Cao, 2016). These are all separate efforts that contribute to building the identity of occupational therapy as a stand-alone health care profession in the PRC, and provide educators and clinicians working in mainland China growing access to international content.

At this time in the PRC, the only nationally recognized professional license is a generalist therapy category known as a Rehabilitation Therapist or Kangfu and is achieved by successful exam completion (Lin, 2014; Lim & Duque, 2011). Growing numbers of occupational therapy programs in mainland China have accomplished and received WFOT approval for meeting the minimum standards beyond the Chinese Rehabilitation Therapy fundamental curriculum. Since the first occupational therapy program recognition in 2010, the PRC occupational therapy programs have expanded from one to six that include entry level bachelor and master's degree programs. A number of the over one hundred and sixty Rehabilitation Therapy programs are in various stages of including occupational therapy content, and seeking WFOT approval (Hermes, et al., 2015; Hermes, et al., 2016; Sinclair, 2015; WFOT, 2016b).

There is strong government support to bring all rehabilitation services (e.g., occupational therapy, physical therapy, and speech therapy) in line with their respective international professional standards (Hermes, et al., 2016; Sinclair & Cao, 2016; Zhou, 2006). Thus, it may be challenging for therapists to develop a professional identity, when the profession is still evolving. The previously established Chinese government's overarching rehabilitation therapist education is being replaced with more advanced

international education mandates for compliance with discipline-specific identities (Sinclair & Cao, 2016). Because the professional identity of an occupational therapist in China is in a transition, it may be challenging for therapists to clearly articulate what it is they need to know, as they are still defining their potential role and contribution to healthcare in the communities they live and work.

There are compounding factors that may present challenges for occupational therapists providing pediatric services in China. The vast geographic expanse and the enormous population demands continue to be pivotal in healthcare trends. The limited number of providers who work outside of urban locations requires families living in rural areas to sacrifice considerable time and revenue to access pediatric rehabilitation services. Within China, there are many spoken dialects and variation in religious or regional habits. The clients and the therapist may have very different life experiences and reference points to try to find common ground for therapeutic communication and culture. The emergence of the international standards further complicates the situation as the therapists have to negotiate how to integrate Western ideology with an Eastern culture. Knowles suggest that when adult learners are presented with a new social role or task (Knowles, 1980; Merriam, 2001), their motivation to learn is enhanced. With all these changes in China, the therapists are confronting new roles, and I hypothesize that these changes may increase their motivation for learning new ways to practice occupational therapy.

The therapists may also feel more pressure to be active and quick learners, as the families often have high expectations to have all their needs met, even with limited

sessions and without the personal financial means. Financial expenses associated with spread out rural visits, compared to convenient proximity for cost effectiveness in urban settings, only broadens the gap of disparity in access. Where wealthier families have more choice to pay for the travel, higher living expenses in city areas or private pay to hire service providers to compensate for the rural lower reimbursement rate. Those with more choice may seek services out of the country itself, locate experts in the expanding Chinese provider pool, or demand higher quality professional services by paying premium dollars for imported service providers (Fisher & Shang, 2013). This disparity in access contributes to a more intense “need to know” for occupational therapists to meet the diversity in client’s expectations for occupational therapy services (Knowles, 1980; Merriam, 2001).

Although many national government policies are slowly changing, local communities and government agencies still fall short in prioritizing dedicated resources for services for families of children with special needs (Fisher & Shang, 2013). Occupational therapists trying to provide pediatric services in the local communities still experience challenges with lower pay, limited welfare supports for client families caring for their children with special needs in their homes, and often limited ability to access adequate health information (Fisher & Shang, 2013). Although the Law of the People’s Republic of China on the Protection of the Disabled Person (1990) was revised in 2008 to focus on person-centered care, the current healthcare insurance system for disability services remains limited in scope and funding. Consequently, families are put in a position to make choices at times to balance their families’ basic needs for food and

shelter on paying for services for their child with special needs at times (Fisher & Shang, 2013). Occupational therapy is not a high paying job in China and has challenges to providing direct services in rural areas. These factors outside the occupational therapists' control may influence their motivation and internal drive to persevere in funding their professional development or seek out additional learning. These rapid changes in China present challenges for occupational therapists as they strive to provide best practices for children and their families (Knowles, 1980; Merriam, 2001; Wang, 2008).

As the oldest running civilization in history, the influence of thousands of years of eastern culture and collectivism persists. However, globalization and technology are shifting attitudes within the current generation of Chinese families (Ryan & Slethaug, 2010; Wang, 2008). Communities and government entities struggle to balance the interest of the greater good with the needs of the individual with disabilities. It has been suggested that the cultural influence and foundations of collectivism may contribute to Chinese learners being more dependent, and not self-directed. Knowles suggest that a hallmark of adult learning is moving toward self-directedness. Knowles' notion of self-directed learning may be in conflict with the roots of collectivism that is prominent in China where the needs of the many supersede the needs of the individual (Kennedy, 2002; Wang, 2008; Wang, et al., 2014).

It has also been suggested that China is currently experiencing a blending of the old traditional views with more bicultural Western perspectives from the Chinese nationals with experiences living abroad and access to global connectivity. A thorough literature search to have a better understanding of the needs of current occupational

therapists providing pediatric services in the People's Republic of China may help determine if Knowles' Adult Learning Theory will be a suitable framework to understand the needs of OTs in China today.

The focus of this doctoral project is the lack of information on the perspectives of the occupational therapists working in pediatrics in mainland China regarding their needs related to providing culturally relevant best practice interventions for children and their families. To understand the perspective of therapists working in China, it is important to understand the cultural context and policies in mainland China. The model above is based on the assumption that occupational therapists currently working in the PRC desire relevant competency to provide best practices in pediatrics.

Synthesis: Appraisal of Current Approaches and Methods

Little research exists on occupational therapists' self-identified needs for providing competent pediatric services in mainland China. Occupational therapists around the world are dedicated to providing high-quality services that enable people to participate in the daily activities of their life (WFOT, 2010; WFOT 2016a). More information is needed to help understand the learning needs of occupational therapists working in pediatrics in Mainland China. This section of the paper will provide an overview and discussion of the World Federation of Occupational Therapists' professional documents and evidence-based research to give an appraisal of current approaches and methods for developing and sustaining competencies for occupational therapists.

The evidence search began by examining WFOT documents guiding the development of the occupational therapy profession, entry-level competency of occupational therapists, maintaining competency in the profession, and advancing practice-based competencies. Next, a literature review in English language search engines was guided by the following questions: *(1) Is there evidence regarding how occupational therapy addresses professional skill competency in pediatrics? (2) Is there evidence regarding how occupational therapy continued competency is addressed in developing countries? And (3) Is there evidence regarding how occupational therapists in China manage evidence-based practice knowledge translation?*

Search Methods

Search engines CINAHL, and PubMed were accessed with the following keywords and MeSH terms: “occupational therapy or occupational therapy” in the main field, however the breakdown for each question is as follows for the additional search words on CINAHL (note that ‘in text citation’ was removed as an option): Question 1 - “competencies or competency,” “pediatrics or children,” resulted in 187 articles in CINAHL, then to further narrow the choices with addition of “skills and knowledge” yielding 49 articles. Question 2 - “competencies or competency” combined with “developing countries” which resulted in 3 articles. Question 3 – “evidence based practice” combined with “knowledge translation” as a term commonly associated with theory application for professional development and the emerging field of study known as “implementation science” that focuses exclusively on the process of bringing research into clinical evidence based practice. These combinations of search terms resulted in 33

articles, and with the addition of “China” there were none. The following are the results of a PubMed advanced search using the same search words for each question: Question 1 – 53 articles with the addition of “skills and knowledge” yielding only 5 articles; Question 2 – resulted in only 2 articles; Question 3 – 65 articles were located. OT Seeker advanced search for title/ abstract only with the same keywords was problematic and indicated no results found.

For each question the results from CINAHL and PubMed were cross-checked for duplications and then narrowed down to those that were directly related to the three questions, empirical, and peer-reviewed. The search process was limited to English language content and does not reflect research published in Mandarin or Cantonese Chinese, resulting in a relatively small body of published research to review at this time. Articles extending back fifteen years were included due to the low numbers of results located; however articles with a title identifying a participant population of primarily occupational therapy students or opinion based content were not included at this time. This project is aimed at competency beyond the academic entry-level. A master list of thirty two articles were located for consideration (Ballie, Bowden, & Meyer, 2013; Bannigan & Moores, 2009; Brown, et al., 2016; Brown, Rodger, Brown, & Roever, 2005; Brown, Tseng, Casey, McDonald, & Lyons, 2010a; Brown, Tseng, Casey, McDonald, & Lyons, 2010b; Buchanan, Siegfried, & Jelsma, 2015; Colquhoun, Letts, Law, MacDermaid, & Missuina, 2010; Dunn & Musolino, 2011; duToit & Wilkinson, 2011; Fleming-Castaldy & Gillen, 2013; Flottorp, et al., 2013; Fortune & Kennedy-Jones, 2014; Glegg, S. M. & Holsti, L. 2010; Glegg, S. M., Livingston, R., & Montgomery, 2016;

Graham et al., 2006; Greber, Ziviani, & Rodger, 2011; King, 2009; King et al., 2008a; King et al., 2008b; King et al., 2011; Kitson et al., 2008;; Metzler & Metz, 2010; Meyer & Land, 2005; Nicolo-Richmond, Pepin, & Larkin, 2016; Quick, Forsyth, & Melton, 2007; Roger, Clark, Banks, O'Brien, & Martinez, 2009; Sirkka, Zingmark, & Larsson-Lund, 2014; Thomas, Saroyan, & Dauphinee, 2011; Unsworth & Baker, 2016; Veras, et al., 2013; Verma, Paterson, & Medves, 2006; Wilding, Curtin, & Whiteford, 2012).

For Question 1, five articles addressed the core competency and threshold concepts of occupational therapy (Ballie et al., 2013; Fortune & Kennedy-Jones, 2014; Nicola-Richmond et al., 2016; Veras, et al., 2013; Verma et al., 2006). An additional research article was selected for detailed review that directly addressed pediatric occupational therapy skills, knowledge, and practice (Brown et al., 2005). For Questions 2, seven articles provided detailed analysis concerning occupational therapists' continued competency, professional development, and transitioning from novice to expert in clinical practice (King, 2009; King et al., 2008a; King et al., 2008b; King et al., 2011; Roger et al., 2009; Unsworth & Baker, 2016; Wilding et al., 2012). For Question 3, two articles specifically selected as they involved knowledge translation in occupational therapy (Colquhoun et al., 2010; Metzler & Metz, 2010).

Literature Overview

The proposed outcome is to develop an evidence-informed method to gather the self-identified learning needs and provide a planned response that addresses, "what do occupational therapists working in pediatrics in mainland China need to provide competent services at this time?" The following WFOT documents were reviewed for

relevant contribution to international understanding of “competency” and “developing country” issues for pediatric occupational therapists working in mainland China: *WFOT Entry-level Competencies for Occupational Therapists* (2008b); *WFOT Position Statement – Competency and Maintaining Competencies* (2012); *WFOT Position Statement – Specialization and Advanced Occupational Therapy Maintaining Competency* (2014b); and *WFOT Minimum Standards for the Education of Occupational Therapists* (2016). Additionally, fourteen articles from the literature were selected for detailed analysis (Ballie et al., 2013; Brown et al., 2005; Colquhoun et al., 2010; Fortune & Kennedy-Jones, 2014; King, 2009; King et al., 2008a; King et al., 2008b; King et al., 2011; Metzler & Metz, 2010; Meyer & Land, 2005; Nicolo-Richmond et al., 2016; Roger et al., 2009; Unsworth & Baker, 2016; Wilding et al., 2012).

Five themes emerged from the evidence-based literature and WFOT documents.

- Entry-level competencies and culturally relevant core threshold concepts for occupational therapists contribute to knowledge and skill development (Fortune & Kennedy-Jones, 2014; Meyer & Land, 2003; Nicola-Richmond, Pepin & Larkin, 2016; Veras et al., 2013; Verma et al., 2006).
- Continued competency requires a commitment to lifelong learning, and supports for transitioning from novice to expert clinician status (King, 2009; King et al., 2008a; King et al., 2008b; Nicola-Richmond et al., 2016; Unsworth & Baker, 2016; Wilding, et al., 2012; WFOT, 2012; WFOT, 2008b; WFOT, 2016c).
- Research details a typical pediatric occupational therapy practice profile (Brown et al., 2005; Brown et al., 2010a; Brown et al., 2010b).

- Knowledge translation models applied in research to occupational therapy knowledge and practices are limited (Colquhoun et al., 2010; Metzler & Metz, 2010).
- Survey trends in participant demographics and descriptors from occupational therapy research can be helpful to identify Chinese occupational therapist work context and professional profile (Scheidegger & Torrance-Foggin, 2015; Shi & Howe, 2016; Tse et al., 2005).

Entry-level Competencies for Occupational Therapists

Figure 2. Framework for Entry-level Competencies

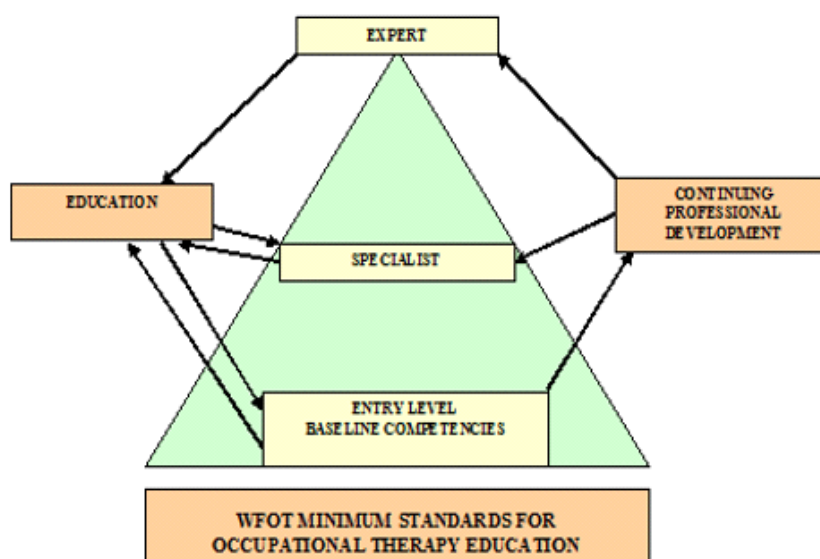


Figure 2.2 WFOT Framework for Entry-level Competencies
(Reproduced with permission, WFOT, 2008b, p 13)

Several WFOT documents help to frame the search process and the understanding of “competence” that guides the life-long learning path of occupational therapists. For

the past 60 years, WFOT has provided entry-level minimum standards for educational programs that train occupational therapy students in the dynamic core competencies necessary to meet the mutually agreed upon high-quality international standards. Although the target audience is academia, the fundamental competencies and purposes apply across the career path for occupational therapists. The 2016 revisions reiterate that the minimum standards document provides globally unifying direction on required content for curriculum planning, emphasizes local context relevance within the international practice perspective, and serves to encourage “continual quality assurance for development beyond the levels specified” (WFOT, 2016c, p. 3). The primary addition in this version from the last revision (2002) is the addition of the fourth purpose addressing “ethics” to the previously recognized societal, professional, and educational primary purposes to address the complexity of global professional healthcare community preparation. The core domains addressed distinguish occupational therapy from the professional allied health professions currently recognized while reinforcing the global professional Knowledge, Skills, and Attitudes (KSA) which are the core competencies that are the focus of this search section.

Although the WFOT curriculum content does focus on pedagogical methods, the KSA areas that addressed competent practice are advocated as evolving guiding concepts through professional life-long learning and relevant for andragogical methods. The translation of the Adult Learning Theory guides the exploration of needs of pediatric occupational therapists working in mainland China beyond the five competencies to be addressed in the survey design. Several topics that emerged from the review and survey

process that lead to the 2016 revisions also need to be considered in this evaluation review process. These are global citizenship and advocacy, contextual issues guiding ethics in professional practice, and inter-professional education experiences.

The entry-level curriculum will not be addressed in this initiative; however, the ongoing learning concepts that contribute towards professionalism, competency, and self-directed learning in professional development will be explored. In 2008, WFOT created a position statement with a career path explanation in response to entry-level competencies for occupational therapists that details the expectations of commitment to being life-long learners as occupational therapists and the application of practice within uniquely relevant contexts of service delivery. The WFOT Framework illuminates two underlying areas that evolve into the ongoing five entry-level competency areas. They contribute to the clinicians developing roles with the support of continued professional development that extend the generic competencies interplaying with the specific competencies as applied within the individual work context or setting. These five competencies are as follows: person-occupation-environment relationship, therapeutic and professional relationships, occupational therapy process, professional reasoning and behavior, and context of professional practice (WFOT, 2008b, p. 6). The two areas are the “expectation of an occupational therapist” (e.g., professional relationships; and governance, autonomy, and accountability), and the “application of practice” (e.g., professional management; underpinning knowledge, understanding and skills; and patient/client assessment and treatment implementation and evaluation). The application for the survey is to gather more information about the occupational therapist's

expectations through more accurate self-identified perceptions of their learning needs and perceptions that paint a unique pediatric practice profile of those working in mainland China in pediatrics currently. The application of practice is more complicated and is a great opportunity in the future to be researched through another initiative.

The macro system level perspective then frames these within the unique context of local health needs, related systems, relevant health philosophies, and purposes defined within that unique cultural context. This is in order to build specialty areas of practice and skills that move the micro-level clinician towards expert status with the “just right” learning challenges on their career path. By 2012, an additional position paper was developed to address competency and maintaining competency. This document further recommends WFOT member organizations' basic structures and components to be put in place in order to continue to meet the changing world healthcare demands and to ensure that occupational therapy is “relevant and sustainable.” WFOT suggests that respective governing bodies require occupational therapy clinicians to maintain their knowledge, skills, and performance capacity through a commitment to “life-long learning.” These specific competencies match each specific countries needs and environment to form the foundation that then is applied to the unique cultural context of regulatory and governing processes. These consistencies provide the essential structure for therapists to move between communities (WFOT, 2008a). These will be the foundation points in a survey to explore with pointed questions that give valuable information from the occupational therapists themselves perspective.

To understand entry-level competencies that contribute to maintaining

competencies, the terms “competencies” and “threshold concepts” were explored in the body of allied health and occupational therapy research. Competency is defined in occupational therapy research in slightly different ways, but does appear to build upon mastery of threshold concepts targeted in entry-level occupational therapy curriculum. However, it is necessary to go beyond the entry-level occupational therapy curriculum contributions to explore how these two concepts apply. Occupational therapists currently working are considered on the WFOT professional development life-long learning trajectory. Verma et al. (2006) found therapy “core competencies” multifaceted, and yet each discipline has a dynamic set of profession specific competencies. These competencies “are more than knowledge and include the understanding of knowledge, clinical skills, interpersonal skills, problem solving, clinical judgment, and technical skills” (Verma et al., 2006, p. 109). The question was asked how threshold capacities might inform the process of transition from novice clinician to advanced competencies (or expert).

Threshold concepts are most often discussed about academic curriculum design but have application in this evidence summary. China has diverse needs that expand from occupational therapy clinicians without WFOT entry-level competency to foreign-educated therapists who may have obtained a level of expertise equivalent with a recognized status as a WFOT organization country member. Meyer and colleagues are attributed to the introduction and development of the “threshold concept” notion for curriculum design in the early 2000’s, with Ballie et al. (2013) linking threshold capabilities with knowledge capabilities through the variation theory. A threshold

concept is most often defined as capturing the essences of a topic, and therefore in occupational therapy represents a focused perspective that seeks to understand the fundamental underpinnings of the profession. Acquiring a threshold concept allows a student or clinician to gain a transformational way of understanding, viewing, or interpreting knowledge to progress in learning (Fortune & Kennedy-Jones, 2014; Meyer and Land, 2003; Nicola-Richmond et al., 2016). Nicola-Richmond et al.'s (2016) research looked at transformative threshold concepts across occupational therapy students, clinicians, and academics in Australia. It explored similarities and differences in participant group responses (Nicola-Richmond et al., 2016). The threshold concept information is relevant to this evidence review as it supports this author's hypothesis of the validity of applying andragogy in viewing occupational therapists' professional development needs as threshold concepts (Meyer & Land, 2006). Transformative, and integrative activities are key to the adult learning theories of occupational therapy advanced learning processes and will need to be explored for mastery in the survey design. A limitation to note in these articles is that it did not identify occupational therapists in roles of managers or other non-traditional practitioners that might be factors in a developing country and again is based on Western culture. The study resulted in ten consensus "threshold concepts" which were as follows: i) understanding and applying models and theories of OT, ii) occupation, iii) evidence-based practice, iv) clinical reasoning, v) discipline-specific skills and knowledge, vi) practicing in context, vii) a client-centered approach, viii) the occupational therapy role, ix) reflective practice, and x) holistic approach (Nicola-Richmond et al., 2016).

Maintaining and Continued Competencies for Occupational Therapists

WFOT calls for all occupational therapy professionals to practice in a competent manner and “do no harm” as the least of the mandates. However, the WFOT Position Statement on Competency and Maintaining Competency (2012) recommends occupational therapists keep updating their knowledge, skills, and capacity throughout their professional lives. Additionally, it states that therapists “must practice in a reasonable manner consistent with current local practice” (WFOT, 2012, p. 1). The WFOT commitment to life-long learning emphasizes the need for therapists to strive for improvement of their skills in order to locate, understand, and apply relevant evidence-based content within their practice. This intrinsic drive aligns with the principles of self-directed life experience-based learning that are a hallmark of andragogy.

China represents a distinctly Eastern cultural context, though it has consumers and clinicians that are from foreign countries and influences from globalization on health care policies and health attitudes. For insight into the variations across countries of occupational therapy competencies and the impact of culture, Roger et al. (2009) undertook a broad literature review of ten WFOT member countries. The study’s aim was to identify the similarities and differences of international English language competency standards for occupational therapy for application to the author’s home country (Australia). Four distinct trends in frameworks emerged that reflected the countries’ respective philosophies towards healthcare, conceptual underpinnings, critical questions addressing structural components and content, and guiding principles for practice within that cultural setting. The specific frameworks were “enabling,”

“technical-prescriptive,” “meta-cognitive,” and “educational” frameworks (Roger et al., 2009, p. 6.).

The framework trends are relevant provided the researchers recognize and adjust for both the cultural bias in learning and attitudes, and local practice context. It was noted that the more western countries (e.g. USA, UK, Australia, New Zealand) were considered an “enabling” framework is providing a guide for “how to approach” a task because of the need for the wider context application with multiple frameworks. Canada’s 2003 version was also considered an “enabling” framework until the 2007 revision, which shifted to a “meta-cognitive” framework that complies more with the CanMEDS professional healthcare roles. The enabling approach was discovered to be in contrast to the country standards from the more eastern countries (e.g., Hong Kong and Singapore), where a “technical-prescriptive” framework was identified. These country competency standards focused on “how to perform” a task and encourage “instructional and almost sequential details on what might be observed during occupational therapists work” (Rogers et al., 2009, p. 375). It is noteworthy that the context for service delivery remained based in hospital and clinical settings with a primarily medical model service format under the oversight of a physician in these two countries. The technical prescriptive framework tends to be narrow in how to apply occupational therapy knowledge and contains the implication of the ability to list exhaustively all occupational therapists essential tasks. The contrasts of country variations in frameworks for application of the same WFOT competencies is relevant to this summary as culture does play a significant role in influencing the competencies, and as such, should be a critical

determinant for identifying the needs and supporting the design and content of a country specific competency efforts. Unfortunately, again the competencies reviewed did not include any non-English language documents.

More insight into the transition from novice to an advanced practitioner or expert was researched in the occupational therapy literature to explore the concepts of continued competency further. King (2009) and King et al. (2008a, 2008b, and 2010) used qualitative research methods to explore the methods, skill, and competency progression in pediatric clinicians. The 2008 studies address the factors associated with the development of expertise and continued competency in pediatric therapists from five disciplines (e.g., occupational therapy, speech therapy, physical therapy, recreational therapy, and behavior therapist) in Ontario, Canada. Their skills were defined as novice, intermediate, and expert based upon years of experience and a multifaceted assessment battery. The measurement outcomes were identified as motivation, openness to experience, and the clinician's caseload breadth and complexity. The authors identified "motivation" as a self-regulatory process including self-monitoring of one's cognitive process. The key finding from the King et al. (2008a, 2008b) research concluded the significant differences between therapists who attain expertise quickly versus those who remain novices after many years of experience appear to be motivation and complexity of work experiences. These study results provide more information on fundamental descriptions and qualities of pediatric therapists across disciplines, where trends pointed to more experience with complex patients instead of a variety of clinical experiences acted to accelerate expertise development.

These studies identified "expertise" as a developmental construct. The studies' authors go a step further to identify "motivation and self-regulatory process as fundamentally necessary for the development of expertise" (King et al., 2008b, p. 111). These findings point to the importance of establishing supportive, yet challenging, work environments for therapists potentially across all areas of specialty and context. From these two studies, a theme emerges building a clearer view of a pediatric professional practice profile for occupational therapists and points to the notion of a distinction of a continuum of competency for professional development from that of an entry-level graduate novice to an advanced clinical expert practitioner. Unfortunately, the limitations were that the small sample size impacted the statistical comparisons and the complexity of disentangling the extent that experience variables alone lead to the development of expertise. The survey designed needs to allow the participants to be introduced to the concept of a continuum of competency and supports that research points to methods that promote the transitional process.

For this paper, the introduction of a continuum of professional development is significant, as well as the generalizability across disciplines that might apply to China's situation where a single rehabilitation therapist is evolving into distinct internationally recognized professions (e.g., physical therapy, occupational therapy, and speech therapy). The survey needs to explore the respondents' competency level from novice to expert as well as the hypothesized supports of motivation and caseload complexity.

For a better understanding of the ways that support the transition from novice to expert, King et al. (2011) explored communities of practice and mentorship, and Wilding

et al. (2012) examined the concept of a community of practice scholars within the field of occupational therapy. King et al. explored mentoring in more detail to promote expertise, and Wilding et al. addressed more precisely the methodology of a community of practice over twelve months to promote scholarship and build participants' confidence and contribute to professional development. The support that the participants found through social media and virtual connections (King et al.; Yan et al.) were validating and were identified as contributing to their satisfaction in their roles as occupational therapists. This is also aligned with the findings that Yan et al. reported regarding the organic social network continuing weekly education discussions that evolved after the Occupational Therapy Educator's course with participants throughout the PRC. These are resources that need to be included to identify if participants are currently using any of these as preferred professional development and knowledge exchange methods in mainland China.

Another concept to address is a clearer understanding of clinical versus professional reasoning. Unsworth and Baker's (2016) systematic review and meta-analysis of a subgroup of peer-reviewed literature provided a narrative and critical analysis addressing what is currently known about the development of professional reasoning through exploration of the differences from novice to expert. Four themes for novices to support their explicit reasoning in a particular area of practice in order to develop expertise, are as follows: a) suggested reflection in order to facilitate reasoning, b) adopting a stance of lifelong learning, c) seeking opportunities to work with clients with complex needs, and d) domain-specific protocol with experts. Unsworth and Baker

indicated there is a limited exploration of constructs related to "embodied knowledge, worldview, and intuition" (Unsworth & Baker, 2016, p. 14), which reinforced the complex nature of acquiring professional reasoning skills with international consistencies. However, the authors noted the research does support that with opportunity, novices can gain insights into and skills towards expert practice. Specific suggestions included making data links more explicit, clarifying a model of expert reasoning, research using a community of practice, and using standardized measures. This systematic review is relevant to this evidence review as it provides some specific suggestions that illuminate the transformative process influencing occupational therapy clinical practice. Applying these suggestions in a developing country, such as the People's Republic of China where there are few experts available to lay the foundation for novice professional reasoning skills, may be areas to focus on for professional development initially. For the survey development, it does reinforce inquiring into the current methods being used and gaining insight into the preferences to drive future topics presentations that include the research-based strategies that build professional reasoning from the western literature on occupational therapy.

These articles provide an understanding of the professional development needs and competencies in occupational therapy. The fundamental threshold concepts, transformative and integrative activities across stages and roles in occupational therapy practice are key to the adult learning theories of occupational therapy advanced learning processes. Specific suggestions to facilitate novice explicit reasoning to transition into expert professional reasoning includes reflection to facilitate reasoning, adopting a stance

of lifelong learning, seeking opportunities to work with clients with complex needs and domain-specific protocol with experts. The pediatric descriptive pieces and protocols from the research that are common across countries will be explored in the section of the survey identify future topics to inform and compare with the occupational therapists working in mainland China. The next section will explore more about particular specialization and achievement of an advanced competency from the perspective of being able to transfer those levels of expertise from country to country.

Specialization or Advanced Competencies for Occupational Therapists

The WFOT documents expand understanding from entry level competencies, to maintaining competencies, through acquisition of specialization, and finally to mastery of expertise with clinical experience being a mandate throughout. The WFOT *Framework for Entry-Level Competencies* details the reciprocal interchange of the educational context and specialization from entry-level competency baseline. The attainment of expert is however one directional, and can only be accomplished with clinical experience and reflection (WFOT, 2008b). The WFOT position statement on *Specialisation and Advanced Occupational Therapy Competencies (2014)* does leave all structure and recognition to the member countries oversight. The rate of acquiring advanced competencies or expertise has most to do with openness to experience, motivation and complexity of work caseload encountered based upon cross-discipline research (King, 2009; King et al., 2008a, 2008b). The research on specifically “how” to best support the transition from novice to experts has proven challenging, as well as any clear delineation of levels between these two. However, professional reasoning is included as a core

competency and needs to be further explored in the advancement to expert.

Clinical reasoning has been an earlier term used in occupational therapy to describe the fundamental processes used by clinicians when planning, providing and reflecting on their practice. However the term “professional reasoning” is inclusive of clinical reasoning, but extends practice to non-clinical settings and is thought to involve all the thinking aspects of the therapeutic relationship and therapy process (Mattingly & Hayes-Fleming, 1994; Schell & Schell, 2008; Unsworth & Baker, 2016). The trends in the literature was that reflective reasoning was a necessity, and that given the opportunity, novices can gain insight into expert practice. Six main attributes appeared to be distinctive for defining expertise. These were as follows: a) knowledge, b) personal qualities and characteristics, c) skills and abilities, d) experience, e) reputation, and f) superior outcomes (King et al., 2008b). Motivation and self-regulation processes were thought to be fundamental for the development of expertise (King et al., 2008b). It was suggested that chunking methods that made expert clinical reasoning explicit was facilitating for novice clinicians (Schell & Schell, 2008), and that a “supportive yet challenging environment” (King et al., 2008b, p. 120) tailored to the combination of the transitioning clinician and the client’s needs was optimal. The concept of novice to expert is relevant for responding to the question of what the learning needs of occupational therapists working China are in order to provide competent, and eventually transformative expert occupational therapy services within their own country and with culturally relevant resources.

Rehabilitation is considered a unique global specialty that requires more than just

application of evidence scaled down for “small adults” (Camden, Tétreault, & Swaine, 2010, p. 1). Although it does include all the services for adults, the focus tends to be on fostering social participation and not solely on specialize interventions. It also encompasses the breadth of infants to teenagers with a unique goal of fostering the development of a child’s capacities and engagement in their various life activities, as well as family-centered care addressing environmental facilitators. In the USA, pediatrics has emerged as a board specialization among many healthcare professions, and within occupational therapy has an AOTA structured and monitored advanced competency process. Pediatrics is also moving towards a unique specialty designation within China based upon personal communication with Dai Hu (October 27, 2016). For the purposes of this survey, it will be relevant to know what trends exist in international research that depicts consistencies across countries for occupational therapy practice profiles working with children and families.

A group of occupational therapy researchers stands out among the literature as their collective works detail consensus and distinction across country lines in pediatric practice profiles. Brown et al. (2005, 2010a, 2010b, 2016) have collected survey results from various country research collaborators (e.g., Canada, UK, Australia, USA, Taiwan, and Hong Kong) and include groups of pediatric occupational therapy clinicians, and most recently include occupational therapy students. This body of research has provided a data-rich pediatric practice profile that includes assessments used, common diagnostic client groups, and uses of theory models, settings, and interventions. Similarities and differences were noted across countries and from one time interval to another. Although

this research has Chinese culture representation with the inclusion of Hong Kong and Taiwanese participants; these two areas have recognized membership in WFOT and organized association activities which makes it difficult to translate directly to the developing mainland Chinese occupational therapy population, as previously noted. However, the global consistencies in the pediatric practice profile will be key foundation items to explore in a survey of mainland Chinese pediatric occupational therapists for comparison with their western influenced counterparts.

Demographics and Contexts for Consideration

From the research articles analyzed, consistencies in survey demographic categories were collected, as well as what is known about Chinese occupational therapists currently. Two articles (Shi & Howe, 2016; Tse et al., 2005) discussed earlier in this chapter addressed demographic profile content for occupational therapists working in Beijing and Hong Kong, but not specific competencies, knowledge or skills information. Although Scheidegger and Torrance-Foggin (2015) did describe cultural perceptions from an exclusively Han nationality group in Xining, Qinghai Province in Western China; the qualitative interview basis of the study design and sample size of four participants is very limiting for applying to this initiative. Scheidegger and Torrance-Foggin's article did point to the role of cultural competence with regard to eastern educated occupational therapy practitioners working with adults. The evidence reviewed provides foundation content to build upon to design a culturally relevant inquiry into pediatric practice in China, in order to further identify their learning needs that support competency in occupational therapy service provision. This does validate why an

evidence-based survey from the perspective of occupational therapists working in China will add to the overall body of knowledge for occupational therapy stakeholders.

Knowledge Translation Models for Occupational Therapy

A final area to investigate for this evidence summary is the broader concept of the actual translation of knowledge in occupational therapy. A greater understanding of theory application, and advancing the science of knowledge translation is critical in occupational therapy (Colquhoun et al., 2010). Knowledge translation is a more overarching term than evidence based practice and is critical for occupational therapy to develop competency. Evidence-based practice (EBP) is the triangulation of research evidence, combined with client needs and goals applied within the unique clinical reasoning and knowledge of the occupational therapists. Knowledge translation (KT) includes components of EBP and any of the tasks that might fill “the gap between what we know and how we use that knowledge” (Colquhoun et al., 2010, p. 271) in order to ensure a better understanding of the relationship between research and practice. Theory is an important dimension for the process of knowledge translation, and there is a need for more study of the best KT theories for occupational therapy (Colquhoun et al., 2010; Law, Missiuni & Pollack, 2008; Metzler & Metz, 2010; Tetroe, 2007), which reflect the contextual focus WFOT best practice documents.

The scoping review undertaken by Colquhoun and colleagues (2010) drew from nursing, medicine and allied health journals, but their research was limited to exploration of three well defined theories with sufficient studies to draw upon in the healthcare literature (e.g. Diffusion of Innovations - DOI, Promoting Action on Research

Implementation in Health Services framework - PARiHS, and the Theory of Planned Behavior - TPB). All three of these leading theories are based in western research, but have been prominent in research within the emerging field of implementation science. Occupational therapy leaders in China have identified the need to develop a conceptual model or framework that captures the unique cultural influences that address the blended traditional modern Chinese experience (Hermes, et al., 2015; Hermes et al., 2016; Lim & Duque, 2011; Lin, 2014). Although both Hong Kong and Taiwan have proximity and longevity with establishment of occupational therapy, a Chinese culture specific occupational therapy theory or model has not been developed yet. A Japanese Canadian professor and researcher has collaborated with colleagues in Japan on the research and development of the Kawa model. It applies an Asian occupation based metaphor from a Japanese lens introducing the natural elements of a river and follows the symbolic representation of life for use with clients (Iwama, 2006). Although the Kawa model was introduced at the WFOT congress as a featured guest speaker in 2006, it is still unclear the role or application it may have in the needs and this stage of occupational therapy development in the PRC.

There are some historic ties and collaborations for Japanese Chinese occupational therapy content and staff. For example, in 2003, the first generation of Chinese occupational therapy foundation textbooks was published and were based upon Japanese textbooks. The new rehabilitation therapy teaching approach using a 2+2 format where the first two years are foundation subjects for common therapy disciplines, and the final two years in which all students study core foundation from their respective professional

disciplines was developed and supported through cooperation of the Japanese International Cooperation Agency, JICA, the Japanese Association of Occupational Therapy (JAOT), the Capital Medical University in China and the Chinese Rehabilitation Research Center (CRRC). There have been new Chinese language textbooks developed since then, though mostly edited by rehabilitation doctors (Sinclair & Cao, 2016). Clarification of the stage of occupational therapy's distinct professional identity and a broader understanding of the EBP dissemination needs within mainland China will determine if one of these well researched implementation science theories will be best to guide the innovation and implementation process once the needs of occupational therapists are clarified.

Although not a theory, the Knowledge-to-Action process model (KtA) launched in Canada has been incorporated into the WHO disease specific initiatives, and was examined specific to occupational therapy practice by Metzler and Metz (2010) and Wilding et al. (2012). The KtA is a compatible method to align occupational therapy person centered values and the desire to improve the uptake process of implementation of evidence-based knowledge with preservation of the rigor and benefit identified in research (Metzler & Metz, 2010). The KtA process cycle offers a planned action sequence to be applied across international, national and local professional levels to incorporate needs identification and feedback loops compatible with a systems approach (Graham et al., 2006; Metzler & Metz, 2010).

The KtA model has two primary components: the knowledge funnel and the action cycle. The Knowledge Funnel includes three separate levels that begin with

inquiry, progresses to synthesis and finishes with knowledge synopsis where information is presented in a clear, concise and user-friendly format (KTDRR, 2016). The actual Action Cycle has seven phases. i) the identification of the problem or the selected knowledge where there is a gap, ii) adaptation of the knowledge to the local context, iii) assessing the barriers to knowledge use, iv) selecting, tailoring, and implementing interventions, v) monitoring the knowledge use, vi) evaluating the outcomes relative to the context, and vii) sustaining the knowledge use (Graham et al., 2006; Metzler & Metz, 2010).

The knowledge translation process does require vigilance in monitoring the problems at each stage from knowledge generation, synthesis and exchange in order for this approach to be efficient (WHO, 2012; KTDRR, 2016). The KtA model could be very helpful in planning a response based upon the identified needs of occupational therapists in China as the model has methods and specific instructions for the various stakeholders and appears responsive to change. This could be particularly relevant where the cyclic processes are continually attentive to the users with the rapid pace of healthcare change and multiple layers of knowledge creation and implementation from eastern and western medicine are meeting.

The more western influenced regions of the PRC (e.g., Taiwan and Hong Kong) have established occupational therapy professional associations with professional publications. Both regions have long-running occupational therapy entry-level degree academic programs with Chinese cultural origins. These organizations provide methods and means for cycling professional development and educational exchange illustrated in

the WFOT Framework for Entry-Level Competency model (WFOT, 2008b) and the Knowledge-to-Action (KtA) knowledge translation model within their respective communities. All of these activities are resources within physical proximity and with similar cultural factors that help support occupational therapy as an emerging distinct healthcare profession within the broader PRC locations.

Implications for Program Design

Several specific components from the evaluation materials reviewed will directly impact the proposed program design. The evidence based suggestions that support the process of novice to expert, addressing self-identified motivation, clarifying the complexity of client caseload, as well as the need for explicit explanations of domain specific protocols to support expert reasoning skills, should all be part of the inquiry content of the survey detailing what already exists and what needs to be developed. Further investigation needs to address the eastern relevance of the ten core threshold concepts of occupational therapy identified in the Nicola-Richmond et al. (2016) study. The vigilance necessary to be mindful of the eastern versus western cultural lens towards the approach to occupational therapy and the factors influencing the experiences of the children and families, clinicians and the healthcare context is a key point in any program design (Roger, et al., 2009; WFOT, 2009; WFOT, 2008b). The final concept to explore is the applicability of the use of social media, a community of practice, and/or mentoring to supporting the learning needs of occupational therapists working in China (Unsworth & Baker, 2016; Wilding, et al., 2012).

The specific features that are most likely to be effective for the occupational

therapists working in mainland China are the materials that facilitate transition from novice to intermediate level, as the available literature repeatedly indicated there are few experienced clinicians or educators in China at this time. The four hypothesized factors of sociopolitical policies, cultural collectivism, language barriers, and limited access to technology (from Chapter 1) impacting the learning of pediatric occupational therapists from this research and the self-reported competence with the five core WFOT concepts will need to be further validated. The content from established WFOT member occupational therapy organizations with Chinese cultural influences may need to be viewed cautiously for both problematic language translation issues and subtleties in cultural relevance as the WFOT diversity and culture concepts suggest. Finally, it will be imperative to coordinate with the leaders of the CARM Occupational Therapy subcommittee who are leading the process towards establishment of a Chinese occupational therapy organization with the WFOT cooperation. Researches should be mindful of the evolution of the distinct identify of occupational therapy as a stand-alone profession and include the government representation overseeing the ongoing changes within the healthcare system in the PRC.

Proposed Response

In a country such as China, the breadth of diversity in needs and preparation for a common clinical skill set appears variable. It will be important to validate western-based research within the context of current Chinese life experiences. Undertaking a needs assessment aimed at gathering relevant feedback from the actual occupational therapy practitioners working in pediatrics will be valuable for future planning and stakeholder

investment guidance. It is apparent that further exploration of the self-identified needs of occupational therapists working in pediatrics in mainland China can contribute to a better understanding and therefore support efforts being undertaken by stakeholders and other established WFOT member countries interested in the prospect of occupational therapy as a stand-alone internationally connected profession in the PRC in the future.

This author proposes to develop a needs assessment survey with culturally relevant, focused questions to develop a demographic practice profile, self-reported learning needs, future topics related to pediatric practice knowledge, and clinical reasoning skills of occupational therapists practicing in China. This survey will draw on evidence-based practice and current literature regarding knowledge translation in occupational therapy.

Conclusion

The specific features that are most likely to be useful for the occupational therapists working in mainland China are the materials that facilitate the transition from novice to intermediate level, as the available literature repeatedly indicated there are few experienced clinicians or educators in China at this time. The role of four hypothesized factors (e.g., socio-political policies, cultural collectivism, language barriers, and limited access to technology) impacting the learning of pediatric occupational therapists and the self-reported competence with the five core WFOT concepts will need to be further validated. The content from established WFOT member occupational therapy organizations with Chinese cultural influences may need to be viewed cautiously for both problematic language translation issues, and subtleties in cultural relevance as the WFOT

diversity and culture concepts suggest. Finally, it will be imperative to coordinate with the leaders of the CARM Occupational Therapy Subcommittee who are leading the process towards the establishment of a Chinese occupational therapy organization with the WFOT cooperation. Researchers should be mindful of the evolution of the distinct identity of occupational therapy as a stand-alone profession and include the government representation overseeing the ongoing changes within the healthcare system in the PRC.

The evidence summary provides information about a) the entry-level competencies and core threshold concepts for occupational therapists, b) insight into continued competency and transition from novice to expert clinician status, c) the parameters and details for advanced practice area competencies to frame a profile of pediatric occupational therapists, d) best knowledge translation models applied to the profession of occupational therapy knowledge and practice, and e) participant demographics and descriptors regarding country and location-specific contexts of occupational therapists and their clients. This information must all be considered in order to appropriately describe and develop occupational therapy practice, competencies, and knowledge translation in the complex and rapidly changing landscape of China.

In conclusion, correlation of the significant content from the above articles together in concert with the WFOT key documents provides a clearer picture of a general profile of the competency needs for pediatric occupational therapists working in any country. WFOT has established minimum entry level competencies (recently revised in 2016) that include international context and a general framework to provide a common link between similar country specific documents but clearly states that WFOT directives

neither preclude nor supersede existing competency standards of member countries (WFOT, 2008b). It is important that methods support the fundamental integration of threshold concepts of occupational therapy in order for clinicians to comply with the WFOT recommendation that occupational therapists “maintain their knowledge, skills, and performance through a process of life-long learning” (WFOT, 2012, p. 1). With WFOT approved and accredited occupational therapy programs in mainland China rapidly expanding in the past five years and a drive to offer rehabilitation services for all as the five-year government plan advocates (CFDP, 2016; Hou, 2016; Sinclair & Cao, 2016) , more coordinated efforts to support practitioners in their context and with the best resources to be successful is a priority.

CHAPTER 3: DESCRIPTION OF THE PROJECT

The previous chapters have discussed and explained that the self-reported needs of occupational therapists working in pediatrics within the greater geopolitical area of China are unknown at this time. In this chapter the planning and process to develop an evidence-informed survey that gathers self-reported information on the learning needs and a resulting descriptive practice profile will be developed and discussed. Based on adult learning theory, the self-identified needs of adult learners improve the intrinsic motivation of the learner and helps educators provide more learner-centered strategies (Kennedy, 2002; Wang, 2008; Wang & Farmer, 2008). The proposed needs assessment survey is designed to gather quantitative and qualitative data from pediatric occupational therapists working in mainland China. The survey will collect responses on questions regarding self-reported learning needs, perceptions of supports or barriers to professional development, satisfaction with current resources for educational development in China, and a demographic profile of participants. The final results of the needs assessment survey can inform the occupational therapists themselves, Chinese professional-development stakeholders, and any foreign collaborator with a vested interest in promoting occupational therapy development and competency in the emerging practice area of pediatrics in mainland China.

Program Context

From Chapter 1 and 2, it was evident that development of a needs assessment survey could assist in gathering a clearer profile of the demographics, the scope of practice, the learning needs and preferences, the perceptions of factors influencing

occupational therapy in China, and the self-identified future topics based on the evidence summary. The information could greatly assist in effective planning and resource allocation to meet these self-identified meaningful needs and eventually move the formal development of the profession of occupational therapy closer to alignment with WFOT standards and possible member status. There are growing numbers of occupational therapy academic programs, emerging pediatric therapy healthcare providers, foreign collaborators supporting and engaging in research on rehabilitation medicine and therapy initiatives, and informed families seeking therapy services for the best outcomes for their children. A needs assessment may eventually provide the information for a “best fit” for professional development initiatives from employers and professional development training providers to their diverse occupational therapy consumer market in mainland China.

Program Elements

Several resources in combination guided the development of the proposed Needs Assessment Survey (see Appendix B) of pediatric occupational therapists working in mainland China. These resources included evidence-based research to provide an appraisal of current approaches and methods for developing and sustaining competencies for occupational therapists from an English language literature search of pediatric occupational therapy and recommendations for qualitative research program evaluation design (Kielhofner, 2006; Newcomer, et al., 2015). The WFOT professional development document resources were examined and provide guidance in cultural relevance and international best practice standards. Additionally, the LIH Healthcare

Olivia's Place pediatric clinic's bilingual manual draft document titled *Knowledge, Skills, and Abilities (KSA Areas) in the Field of Pediatric Occupational Therapy: A Framework for Continuing Education and Development (1st Ed, 2015)* was reviewed in order to determine culturally relevant standards for occupational therapy practice. Next, a strategic review was completed of key stakeholders with past and current initiatives that supports the development of occupational therapy in the PRC. Finally, personal communication virtually and in person with identified researchers and OT academics involved in supporting pediatric initiatives within mainland China was begun. All of these will be integrated to develop a meaningful needs assessment survey draft to begin to understand the self-identified learning needs of pediatric occupational therapists working in mainland China.

Needs Assessment Survey Guidelines

This needs assessment will function simultaneously as applied research and a political process (Finlayson & Van Denend, 2006; Wambeam, 2015). It will define and examine the parameters of the learning needs of pediatric occupational therapists working in China while also influencing the target audiences and external decision-makers (i.e., government, physicians, etc.). In this way, the needs assessment may inform policy and decision-making while collecting data. It may intermittently shift the role it plays in the project depending on the level of stakeholder involvement, political influence or perspective, and perceptions of the scope of topic issues (Finlayson & Van Denend, 2006).

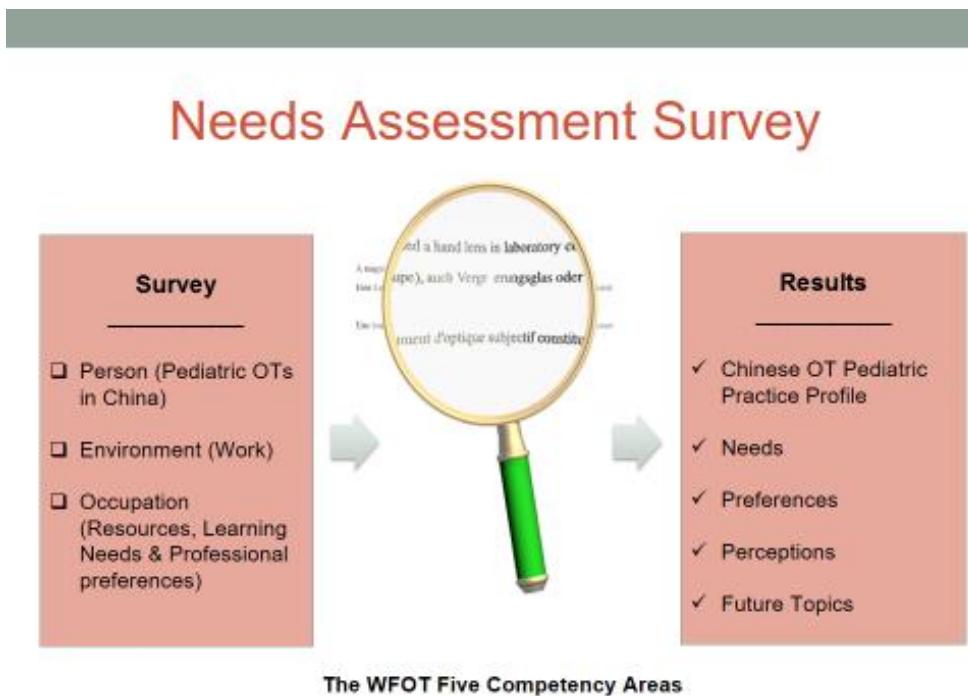
This needs assessment survey will be the first step of a longer-term program evaluation process to identify, understand, and make recommendations to disseminate about meeting the learning needs of pediatric occupational therapist working in mainland China. The survey format is a mixed method design with the purpose of gathering quantitative and qualitative data on perceptions of support or barriers to professional development, and level of satisfaction with current resources for educational development through identified printed material and through networking opportunities within China. The questions and results are intended to form the basis through the stakeholders to make recommendations that allow them to make more efficient plans and investments.

The information can help western and Chinese-based stakeholders involved in collaborative occupational therapy professional development program initiatives aimed at supporting occupational therapy as a stand-alone sustainable globally connected healthcare profession within mainland China. Aligning the best interests of the key stakeholders and occupational therapists to build and support professional development layers in occupational therapy has potential for significant influence. If aligned, these two groups' interests may facilitate an internationally sustainable profession envisioned by the WFOT non-member resource package documents (WFOT, 2009). The final summative phase of the program evaluation targeting the occupational therapists learning needs for competent practice in mainland China will result in a combined participants' and stakeholders' input, perceptions, and recommendations for a more evidence-informed planned response for improved fit for all.

Activities of Program

Survey Design

Figure 3.1 Needs Assessment Survey WFOT Five Competency Area Lens



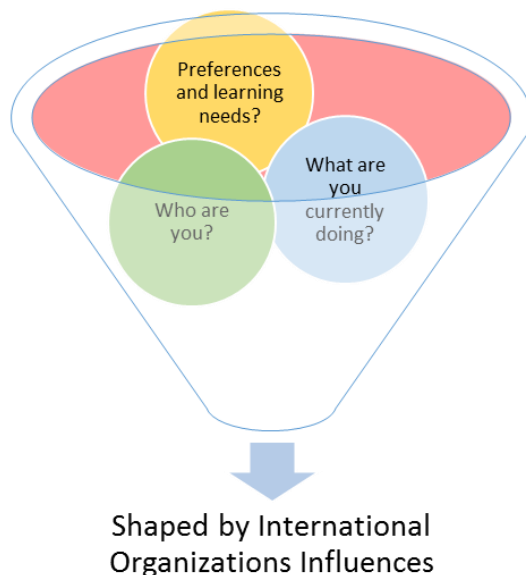
The needs assessment survey attempts to gain more information on the person or the pediatric occupational therapists working in mainland China themselves, the environment in which they work, and the occupational resources, learning needs, and professional preferences through the WFOT five competencies lens (see figure 3.1). The essential knowledge, skills, and attitudes from the five WFOT entry-level competencies are as follows (WFOT, 2008b; WFOT, 2016):

- person-occupation-environment relationships and the relationship of occupation to health and well-being
- therapeutic and professional relationships

- occupational therapy process encompassing collaborative, people-centered, occupational focused processes
- professional reasoning and behavior
- specific context of professional practice

The competency areas are explored throughout the five-distinct survey sections with the person-occupation-environment and the therapeutic and professional relationships being primarily explored in the *Who Are You* section. The occupational therapy process and the context of professional practice are investigated in the *What Are You Currently Doing* section of the survey. The final three sections explore more in-depth professional reasoning and behaviors. Figure 3.2 illustrates the intrinsic person-centered factors that are shaped by the external national and international policies and influences.

Figure 3.2 Intrinsic Factors Shaped by International Organizational Influences



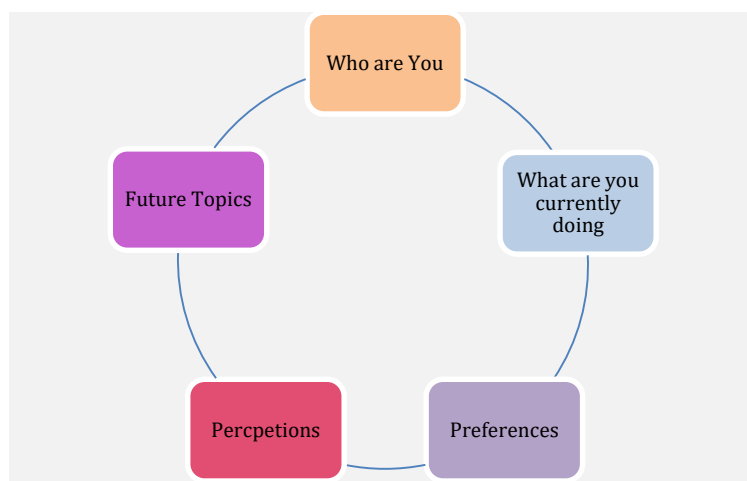
The literature review and recommendations guided the survey developed by this author. The research that used surveys yielded research methods and terminology

regarding approaches and formats in survey designs (Brown et al., 2005; Brown et al., 2010b; King et al., 2008; Shi & Howe, 2016; Sinclair & Cao, 2016; Tse et al., 2005; Yan, et al., 2012). Several research projects specifically focused on identified pediatric occupational therapists, as well as hospital-based occupational therapists working in China to view the formatting and similarities in questioning, such as the modified AOTA Salary and Workforce survey or the Professional Development survey included for the OT Educator's course. Relevant qualitative research methods text resources related to survey design (Finlayson, 2006; Forsyth & Kviz, 2006; Newcomer & Triplett, 2015; Taylor & Keilhofner, 2006; Wambeam, 2015), were used to arrive at the five essential areas for the draft Needs Assessment Survey.

This survey begins with a descriptive section regarding individual and work setting demographics. The survey's second section addresses descriptive responses with multiple choice for pediatric-related content. The third section begins to shift into subjective and comparative inquiry with preferences and ranking for professional development delivery methods. The fourth section of questions then progresses to comparative responses with a 5-point Likert scale series of questions. These questions address whether hypothesized factors support or present barriers (see chapter 2) to the participant's occupational therapy professional development needs. This section funnels to a forced-choice question format (e.g., yes/no response) regarding self-reported perceptions of professional development needs for occupational therapy competency (Forsyth & Kviz, 2006). This section includes open-ended questions regarding values as a healthcare worker and what can be improved for occupational therapists to meet their

professional development learning needs. The fifth survey section presents a set of multiple-choice questions about the clinicians' preferences and suggested future topics.

Figure 3.3 Needs Assessment Survey components



Survey Section 1: Who Are You – Descriptive Data

The first survey area gathers descriptive information on the respondents who completed the following section: "*Who are you.*" This section was guided by the AOTA salary and workforce survey modified in Shi and Howe (2016), as well as both the Brown et al. (2005) and King et al. (2008a) surveys from the respective research studies. Sinclair and Cao (2017) indicated that most occupational therapists still work primarily in hospital and outpatient client settings. Other practice areas outside the traditional rehabilitation settings are slowly emerging. These are explored by suggesting some non-traditional healthcare settings. The WFOT competency area of occupation-person-environment, and the health and well-being competency area are researched with questions that address the typical types of clients and their general descriptive information. The therapeutic and professional relationship foundations are further explored by questions surrounding occupational therapy curriculum in this section.

Survey Section 2: What Are You Currently Doing – Descriptive Data

The second survey area combines gathering more information on the respondent's current professional practice settings and addressing what they currently use to access continuing education training, which informed the following area: "*What are you currently doing*". Descriptive terms and categories for work settings were based upon Shi & Howe, (2016), Sinclair and Cao (2017), and Tse et al. (2005) survey designs. The learning options were influenced by conducive learning environments for Asian context suggestions by Singh (2002). The dissemination methods of written, electronic, or in-person communication recommendations for adult learning and behavior change were influenced by literature (Froyd, 2001; Jacobs, 2017; Yan, et al., 2012). The specific pediatric professional setting content was derived from Brown et al. (2010a) and additional theory models were added based on Wong and Fisher (2015). This section builds information related to the WFOT competency area regarding the occupational therapy process and the context of practice. The questions are aimed at gaining a better understanding of theory and approaches, assessment tools used, and trends in pediatric diagnostic groups as well as a clearer picture of the work setting and perceptions of satisfaction with materials available.

Survey section 3: Preferences – Comparative Ranking Data

The third survey area explores more information on the respondents' preferred method of receiving additional training or information on occupational therapy that details their self-reported preferences (Wang, 2008) and again used terminology from the dissemination resources cited above which informed the following area: "*Preferences*."

The questions are reversed to validate unique preferences for live, electronic, or written learning. This section in addition to the following two sections on perceptions and topic interest contribute to a better understanding of the WFOT professional reasoning and behavior competency area. The information assembles details on clinicians' preferences for gathering professional information about occupational therapy and preferred learning methods for additional training.

Survey Section 4: Perceptions and Plans – Qualitative and Comparative Data

The fourth survey area was aimed at gathering the respondents' perceptions on the theorized factors from Chapter 1 (e.g., language, culture, technology, and sociopolitical policies) that may be influencing occupational therapy practice in mainland China which informed the following area: "*Perceptions*". A funnel effect was used to first have a forced choice 5-point Likert scale response for the impact of the suggested factors and then a set of yes/no responses with an option for additional comments on future education plans, preparedness for service delivery, and a final open-ended value question. This provides question validation while exploring the topic and addresses a common phenomenon in Asian cultures of difficulty responding to open-ended questions at the onset of a discussion (Wang, 2008).

Survey Section 5: Future Topics – Qualitative and Descriptive Data

The fifth survey area was based on trends in pediatric professional development and competencies, which informed the following area: "*Future topics*". This final area details more content for professional development education topics. The respondents can indicate any interests for additional education in future topic areas (AOTA, 2014b;

Brown et al., 2005; Sinclair & Cao, 2016). This gathers relevant information for the key stakeholders and raises the participants' awareness regarding previously unfamiliar content within the international occupational therapy domain.

Intended Recipients of Program

The target population consists of five subgroups. All of the participants are self-identifying as "occupational therapist", as well as currently working with children and their families in mainland China areas. One group of participants consisted of foreigners with occupational therapy education outside the PRC. A second group is native Chinese with occupational therapy education outside of the PRC. A third group is native Chinese who attended mainland China WFOT approved occupational therapy education programs. The fourth group is native Chinese who attended occupational therapy programs in established regions of the PRC that includes Taiwan or Hong Kong. The final group is individuals who self-identify as occupational therapists but have not had formal education from a WFOT recognized program.

Methods to Recruit

The first step is identification of the three levels of stakeholders identified for this research. The groups are as follows:

- Producers (government, non-government, and educational partners interested in improving the care provided by occupational therapy clinicians within the PRC)
- Occupational therapists (practicing clinicians working with children in the PRC)
- Families and children receiving the services of the clinicians above

The recruitment of the focus group participants will be from a select group of

professional development providers by invitation of the author(s). Once the final Needs Assessment Survey is completed, a pilot group will be established. It will be composed of occupational therapists from the initial Focus Group participants and from the LIH Healthcare Olivia's Place staff at their four clinics (e.g. Shanghai, Beijing, Shenzhen, and Kunming). This will be voluntary participation with de-identified responses. The next phase is to use WeChat snowball sampling from author(s) to invite their contacts who are identifying as occupational therapists to complete the survey. It will be worth sending the survey link to the WFOT Chinese Occupational Therapy program faculty who have graduating classes already. The final population pool to engage is at the annual educator's conference in China where the audience will include psychiatrists and teachers in all areas of therapy education programs.

Consent to Participate:

The author(s) will seek IRB approval through both a vested interest USA and a Chinese university prior to initiating the program. Two methods to inform participants will be used. One is a signed informed consent form with a Mandarin text version available attached to the paper version used for the pilot group (See Appendix C). For participants of the online survey, a letter of consent will be embedded at the beginning in the survey for participants to sign prior to the start of the survey.

Outcomes

The main outcomes are to obtain a clear self-reported profile on learning needs and preferences by current occupational therapists who are working in pediatrics in mainland China. The specific outcomes are as follows: identify the self-selected

preferences in learning methods and further illuminate the perceptions of challenges and supports for providing competent, evidence-based practice occupational therapy in pediatrics in mainland China. The long-term goals are that there will be an increase in the number of knowledgeable and skilled occupational therapists working in pediatrics throughout the PRC and that there will be a stakeholder needs-based educational programming approach developed to reflect more intrinsically client-centered offerings.

Potential Barriers and Challenges:

The hypothesized factors impacting the professional development needs of occupational therapists in China may also affect the proposed program of a Needs Assessment Survey. It is possible that the roots of cultural collectivism where identifying personal preferences or needs may seem too uncomfortable given the needs of the greater good which may impact the validity of the responses by Eastern national respondents. Although the government policies do not appear to be a barrier or challenge, it is possible the delivery of the proposed survey may have some delays with agency approval to be used within China. There are diverse groups of foreigners and Chinese clinicians with native language preferences other than English or Simplified Chinese. Consequently, the language translation may still be a barrier. The virtual format may still have issues related to lack of context from person-to-person viewing and potential limitation on communication resources.

Every effort will be made to establish a progression in the survey questions to facilitate a trust-based relationship. An effort will be made to respect any potential responses that may be viewed as critical of the organizations or systems of a collectivist

culture. This author believes the greatest challenge will be in language translation where the software translation programs configured for automatic translation often miss the contextual meaning.

CHAPTER 4: EVALUATION PLAN

The self-reported needs of occupational therapists working in pediatrics within the greater geopolitical area of China are not well researched at this time. Based on adult learning theory, having the self-identified needs of adult learners improves the intrinsic motivation of the learner and helps the educators provide more learner-centered strategies in eastern and western cultures (Kennedy, 2002; Wang, 2008; Wang & Farmer, 2008). Several occupational therapy academic initiatives from the United States have been launched in the past decade with Chinese partners for student learning (AOTA, 2014a; Brandt et al., 2014; Mu et al., 2016; Sinclair, 2015; Sinclair & Cao, 2016). Other international partnerships are emerging to support the development of both occupational therapy curriculum and professional development in mainland China. However, a formal needs assessment of the occupational therapists working in China has yet to be undertaken.

The following chapter will detail a program evaluation plan for a needs assessment that is based on current literature regarding pediatric occupational therapy practices. Several evidence-informed materials have been developed through this doctoral project to facilitate the focus group discussions. The focus group process is used to verify what the current needs and resources are within the context and from the cultural perspective of professional development providers in China. The program evaluation plan uses two distinct surveys (e.g., the five-section proposed needs assessment survey and a simple five question customer satisfaction survey) to inform and verify hypothesized factors with more descriptive content, and satisfaction inquiry

respectively. The surveys are combined with facilitated audience process sessions to gather input, engage audiences in the program evaluation phases, validate the hypothesized factors and learning needs, and verify the final results and recommendations with the primary and secondary audiences before dissemination. The program evaluation summary will be comprehensive and will help identify meaningful responses from within a context of the multiple groups of stakeholders.

Purpose

The core purpose of the program evaluation is descriptive and exploratory. The author plans to gather meaningful information on the current trends from the businesses, organizations, and universities inside and outside of China that are trying to support occupational therapists' professional development needs while working in the PRC. The mixed methods qualitative and quantitative descriptive study will include one focus group of key stakeholders, and surveys to gather descriptive information using both Likert-style multiple choice and open ended questions. This information will guide development of a needs assessment program evaluation process with a resulting program evaluation summary. The summary will contain a set of recommendations that outline the needs of occupational therapists working in pediatrics in China and the existing resources or initiatives to communicate to stakeholders as they design additional program development modules to be the most effective investment of their resources.

Need for Program Evaluation

A needs assessment survey has been developed based on available English language research on occupational therapy competency and strategies that support

transitioning from entry-level novice clinician to advanced competency or expertise in pediatrics. This survey is the start of a larger needs assessment process that involves the key stakeholder's contributions and utilization of the final results (Newcomer & Triplett, 2015). Therapists can gain a better understanding of their learning needs and the current evidence-informed factors guiding global pediatric practice. Therapists also have a voice in indicating their unique perspectives and preferences to the professional development stakeholders by participating in the survey and having access to the results.

Adult learning theory supports that when therapists identify their perceptions of their learning needs for professional development, it adds to their motivation and intrinsic investment. Therapists having their needs met in professional development, in turn, contribute to their success following the WFOT described life-long learning path that is necessary for professional development. Accurate, current data on the adult learner needs increases the likelihood the occupational therapists will engage in the professional development learning opportunity and raises the possibility that the new learning concepts will transfer and have an impact on their performance. The communication and exchange of information between audiences with a research-based inquiry, data analysis, and implementation plan based upon a needs assessment are anticipated to help with sustainable similar goals. Both the occupational therapists and the providers of professional development activities gain a better understanding of occupational therapy learning needs in context and the global evidence-based competency content. Once the program processes are completed, the implementation and dissemination of the program summary results occur. The program evaluation report recommendations are

hypothesized to have an impact on improving the perception of the quality of pediatric occupational therapy services received by caregivers and families in mainland China.

Plan for Evaluability Assessment

The participant-oriented evaluability assessment approach will be used initially to identify the current activities of the key stakeholders to assess if the program is ready for evaluation and agreement on realistic program goals, criteria and intended uses of the program processes and data analysis information (Wholey, 2015). The participant agreement on this information will be used to refine further qualitative inquiry tools for self-reported needs of the occupational therapists that work in pediatrics in the PRC and to achieve consensus regarding next steps from the key stakeholders. The moderated focus group format gathers qualitative information and continues until a coherent picture of primary needs is attained. This feedback and the select participation of key focus group occupational therapists in the pilot launch will help to assure any recommendations to change the proposed needs assessment survey addresses the intent of the focus group and the author. The main aim is to identify the highlights regarding the appropriateness and completeness of current activities for occupational therapy professional development. The survey will collect the participant preferences for future initiatives that address their professional development while they are working in the PRC. Analysis of qualitative data from the focus group can then serve as the basis for a later systematic collection of qualitative and quantitative survey information from a wider representative group in subsequent stages (Implementation, Data Analysis and Review) of the program evaluation process.

The evaluability assessment will consist of a series of groups that include a Focus Group, process groups with the *Doers* and the *Producers*, and semi-structured interviews when necessary. These interactive communications including the range of key stakeholders capable of providing culturally sensitive information relevant for improvement of the planning, effectiveness, and impact of their dedicated resources in China. Once the survey data results are in, another focus group will be reconvened virtually to review and validate the results with both the professional development stakeholders and pediatric occupational therapists working in mainland China.

Evaluation Target Audiences

This research project has three levels of stakeholder groups that include the occupational therapists, the caregivers and families of children receiving therapy, and the businesses, universities or organizations that are interested or provide professional development for occupational therapists. The primary target audience is the pediatric occupational therapists in the People's Republic of China (PRC) which is a diverse composition of practitioners based on country of origin and education. The secondary audiences comprise two separate groups that include the caregivers and families of the children receiving occupational therapy while in mainland China, and the larger stakeholder group of organizations providing trainings impacted by having the learning needs of occupational therapists met.

The primary audience of the pediatric occupational therapists (*the Doers*) includes five subgroups illustrated in Table 4.1 below:

The Doers Category	Description
Mainland WFOT OT trained OTs	Chinese occupational therapy clinicians with occupational therapy training within WFOT approved mainland programs.
Non-WFOT trained OTs	Chinese occupational therapy clinicians with occupational therapy training that are not currently WFOT approved mainland programs
Hong Kong or Taiwan Trained Chinese OTs	Chinese occupational therapy clinicians with occupational therapy training in Taiwan or Hong Kong WFOT approved program
Chinese Foreign Trained OTs	Chinese occupational therapy clinicians with occupational therapy training at WFOT approved program outside of the PRC
Foreign OTs	Foreigners (or expats) occupational therapy clinicians with occupational therapy training at WFOT approved program outside of mainland China

Table 4.1. Pediatric Occupational Therapists Working in Mainland China Groups

There are two secondary audiences of the program evaluation. One group is the caregivers and families whose children receive occupational therapy services (the *Receivers*) and the other group is the professional development organizations that provide training and activities for an occupational therapist in mainland China (the *Producers*).

The *Producers* stakeholders' subgroups are separated out as follows in Table 4.2:

The Producers Category	Description
Chinese employers	Employers of pediatric occupational therapists in China who may either approve external professional development or provide internal training to their staff.
Chinese OT programs	OT academic programs in China providing professional development content to occupational therapists.
WFOT/foreign OT programs	WFOT and Foreign OT educational programs addressing the promotion of occupational therapy and professional development in China.
CARM Occupational Therapists Group	A subgroup working on governing policies and practice standards for a legally recognized and internationally approved Chinese Occupational Therapy Association and best practice in the PRC. This group participates in

	activities to review international content, refine for contextual relevance and produce documents for occupational therapy in China. The group also contributes to policy and regulatory processes as indicated, and identification of guest speakers and topics for professional meetings, conferences, and training.
Bicultural OT Educators	Chinese bilingual educators with lived experience in western countries who provide professional development post entry level trainings. These individuals often have multiple roles outside of their teaching.
PD businesses & NGO	Businesses or non-government organizations involved or interested in providing occupational therapy professional development.

Table 4.2. The Professional Development Producers in China

Focus Group

Krueger and Casey (2015) indicate that focus groups work well for understanding unique perspectives of participants regarding their needs and assets in their lives and communities. A focus group can also be helpful for pilot testing and provide input on how things might be improved. A defining characteristic of a focus group is the planning around the discussion, the trained moderator, and the focused sequence that promotes non-threatening conversations of participants (Krueger & Casey, 2015). A consensus is not necessary on all items and patterns in a Focus Group. Trends from the Focus Group are examined so that the analysis fits the study, and the process itself provides valuable research content. Process groups are also used during this evaluation plan to gain understanding and elicit feedback from stakeholders regarding the validity of data results and to disseminate. However, the process groups are not focus groups as they will not have a moderator, and are only intended to facilitate the exchange of information and opinions. The focus group only occurs at the beginning of the program planning phase,

but process groups with the *Doers* and the *Producers* will be occurring at least twice during the analysis phase.

The planned focus group is to be comprised of 6-10 invited stakeholders from the *Producers* group who meet for one to two hours each session. Common documents that help define terms and groups used have been prepared and will be distributed prior to the group (Program Evaluation Logic Model - Appendix C, Factsheet - Appendix D, and Stakeholder Groups in Mainland China Chart - Appendix E). An audio recording of the focus group, with permission from participants, is planned to ensure essential information is captured. The first meeting will be in-person, and then process groups will meet virtually after that. The focus group interaction will be facilitated with environmental cues to foster communication, trust, and transparency (Bryson & Patton, 2015). A trained moderator plus a bilingual volunteer assistant will be present to post and record summary points in both simplified Mandarin Chinese and English. The group would be seated in a circle to reduce perceptions of leadership or hierarchy, and the moderator may need to facilitate smaller discussion pods if the group is too large to talk openly.

It is important to allow everyone to share their involvement and connection with occupational therapy in China equally to establish trust and transparency in past initiatives and collaborations. The next priority is a brainstorming session to draft a questioning route and build a culture checklist that will reflect the context specific core considerations that may influence the four phases that include planning, implementation, analysis, and dissemination of the program evaluation (Hood, Hopson, & Kirkhart, 2015, p. 306). The moderator will identify critical success in collaborations and helpful

resources. Participants will be encouraged to volunteer for tasks that are a good match with their skills and resources that contribute to success as a group. Additional meetings may be needed to gather more reflective input if the challenges in language or cultural backgrounds become problematic.

The Focus Group moderator and the prepared materials will be helpful to assure the common understanding of the variations in the many groups and policies in China that impact occupational therapy professional development. It will be essential to identifying interest and power levels of these groups and policy making organizations by their roles as a player, subject, context setter or part of the crowd for the project. For example, a player has both an interest and significant influence on the outcome of the project, but the crowd likely has little direct interest or power. The subjects do have interests but little power, and conversely, the context setter may have power with little interest. The groups' preferences in dissemination methods will be identified based on power and interest differentials during the first Focus Group session to assist in longer term planning (Bryson & Patton, 2015). (See Group Stakeholder Analysis Form - Appendix F for more information). All the supporting documentations for the focus group to prepare and use during the discussion to aide in timely group processes are listed in Table 4.3 below:

Document Title	Appendix	Description
Program Evaluation Logic Model	C	Graphic overview of the program evaluation processes
Factsheet	D	Brief 2 page explanation of the project
Stakeholder Groups in Mainland China chart	E	Definition of the five target subgroups of pediatric occupational therapists in China
Focus Group Stakeholders Analysis form	F	Worksheet chart to complete as group on specific Chinese stakeholders
Stakeholders Evaluation Questions	G	Targeted probing questions worksheet for the four identified stakeholder groups
WFOT Competencies and Survey Chart	H	Explanation of the overlap of the WFOT competencies within the design of the Needs Assessment
Modified Design Matrix of Hypothesized Factors	I	Explanation of language, cultural collectivism, technology and sociopolitical policies
Sample Family Satisfaction Survey	J	Sample customer satisfaction survey
Needs Assessment survey	A	Draft of evidence informed learning needs assessment that gathers demographic information, work profile, perceptions of four hypothesized factors, professional development preferences, and future topics.

Table 4.3. Focus Groups Materials

Logic Model

See Logic Model in Appendix C.

Scope



Figure 4.1 Project Overview

The scope of this program evaluation is a four-phase process. The first is the development and evaluation-planning phase. The second is the implementation phase and verification of the needs. The third is the data analysis and review phase where validation from the respective stakeholders occurs. The final phase is the dissemination of the assessment results. There are essentially seven steps that cycle through the verification of the needs, returning to the stakeholders to validate the results, and then finally to come back with the assessment and action recommendations. All phases described are below.

In phase one of the development of the program evaluation is detailed with the steps as follows. First, the author(s) identified *the Producers*, *the Doers*, and *the Receivers* respectively in the mainland Chinese population. The program evaluation consultant or trained moderator then facilitates a focus group that includes 8 to 10 representatives of the *Producers* stakeholder category. The focus group meeting will be scheduled within the first four -nine months from the approval of the project. The tasks are to complete the analysis and planning as a group for the successive steps. The survey is fine-tuned with the focus groups' feedback and finalized. Next, a pilot survey is launch and includes select members of the focus group that is also pediatric occupational therapists. These are combined with a convenience sampling from a Chinese clinic with representative occupational therapists from all five groups if possible. The author compiles test results and informs the *Producers* focus group accordingly and makes any additional adjustments as recommended.

Phase two begins the Implementation process. The final Needs Assessment survey gets launched, and convenience sampling of the *Doers* complete it within the available time frame. At the same time, a standardized pre-agreed five question satisfaction survey is distributed by the *Producers* of their respective *Receivers* to establish baseline customer satisfaction data. The Implementation phase is a quick (e.g. four weeks) but critical.

Then the process shifts to the data analysis and review phase. The statistician contractor and the author(s) undertake the data analysis process with the embedded virtual statistical survey results and further addresses any necessary analytical methods

for a proper understanding of the statistical trends and correlations. The *Producers* again connect for a virtual process group to review the results with the author. The team validates any trends or input on recommendations for understanding the needs of the occupational therapists or prioritizing professional development topics from the survey results. The *Producers* are asked to review the results with their respective *Doers* to acknowledge, validate the results, and make plans to implement the data efficiently. The *Producers* again return to the author with any additional feedback to include in the final program evaluation summary report. In Chapter 6 the last phase of the dissemination plan describes how the information will be further distributed.

Evaluation Questions

See Stakeholder Evaluation Questions in Appendix G.

Research Design

The survey will be a mixed method design

Phase 1- preparation stage with Focus Group

Phase 2 –virtual needs assessment survey and customer satisfaction survey

Phase 3 – survey data analysis, process groups and field notes by author(s)

Data Management Plan

The WeChat Diaochapai package (Dazueconsulting, n.d.) provides statistical analysis and graphic reports. A password protected USB will be used to maintain the confidentiality and security of the data due to international variations in cyber security and threats to virtual content from unwanted parties. An excel sheet will be used to track focus group content, and password protected folders will contain all reports, field notes,

and de-identified data results. The summary of the data will be shared with stakeholders via email or WeChat by the author(s) during the dissemination windows described in Chapter 6.

Data Gathering

The focus group discussion and key points will be analyzed by the author(s) to make changes to the survey and addressed in a summary report to *the Producer* group before launching the survey. Modifications will be made based on the key factors identified through the focus group processes as needed on the proposed Needs Assessment Survey (See Appendix A). The survey questions are a mixture of both fixed choice using Likert-style rating, ranking, and multiple choice with one open-ended write in response at the end. The survey uses forced-choice questions (yes/ no response) that ask if there are unmet professional development needs for their occupational therapy skill development. This both establishes there is validity to exploring the topic and addresses a common phenomenon in Asian cultures of difficulty responding to open-ended questions at the onset of a discussion. Ranking preferences for methods of professional development and professional information delivery addresses platform choices relevant to stakeholders. And the final section questions return to multiple choice for future topics in pediatric practice to gather quantitative frequency and trends.

Data Analysis and Reporting

The contracted statistician and program evaluation consultant will assist in determining the specific methods and statistical analysis that are used for each section in the planning phase. The content from the focus group, and surveys provides specific

qualitative and quantitative data that need different statistical analysis to understand. The qualitative analysis from the focus groups will provide patterns and trends in the frequency of current professional development activities, the intensity of the *Producers* investments and interests in future focused occupational therapy activities, and the extensiveness of the existing methods. The qualitative analysis from the survey will provide perceptions of hypothesized factors that include language, cultural collectivism, technology and sociopolitical policies and satisfaction with current methods that address professional development in mainland China. The quantitative analysis from the survey will provide information demographic profile with frequencies, contexts, and other detailed information about the occupational therapists.

A descriptive method will be used for the focus group content analysis, and will rely on an ethnographic decision model to enumerate the key themes and trends to be completed by the author (s). The survey will be completed virtually and will have data analysis embedded in the program features. The survey analysis requires a statistician as it contains multiple-choice descriptive responses, ranking order responses, yes/ no forced choice, and open-ended question responses. A graph display will be used to illustrate the distribution of the descriptive responses on trending statistics that address the range, variance, and standard deviations. The embedded statistical analysis from the WeChat platform will be used to gain a better understanding of the response trends. The results will be verified with *the Doers* and *the Producers*.

CHAPTER 5: FUNDING PLAN

Proposed program

This funding plan addresses the four phases of the Needs Assessment of pediatric occupational therapists working in mainland China. Phase 1 is the formative phase for development and planning of a specific needs assessment survey. Phase 2 is the implementation phase for the survey distribution and collection of the data that verifies the hypothesized learning needs and factors. Phase 3 is the analysis phase of the survey and the validation of the results. Finally Phase 4 is the dissemination phase of the program summary and recommendations from the survey processes.

The formation phase of the survey design will require a focus group to be held as a virtual group or a live meeting scheduled at a convenience occupational therapy conference. This author will be the lead facilitator, and Chinese co-investigator will gather the input from the focus group to formalize the survey content and format. The implementation phase proposal is based upon a virtual format. The data analysis phase will require funding that will be determined by the selection of the mechanism. Most electronic survey platforms including the Chinese platform, WeChat, are available at no cost and include a basic data analysis function. However, WeChat does require a higher-level service plan for detailed statistical analytics with surveys. Therefore the more inclusive performance package will be purchased for the 12 months that the study access may be needed.

The dissemination phase communicates the entire program results including the focus group recommendations, the survey trends and data results. The program summary

is delivered to the current stakeholders and potential future investors, educators, policy makers, occupational therapist professional education providers, and occupational therapy clinicians or students that may be interested in the results regarding the status of an occupational therapy pediatric practice profile in mainland China. The funding plan will include an optional paper survey budget (Funding Plan B) in case a virtual format is problematic with technology in China. Available local resources are identified, proposed budgets regarding needed resources, and potential funding sources will follow and include expenses for program implementation as well as dissemination of program evaluation results.

Available Local Chinese Resources

- World Federation of Occupational Therapists (WFOT, 2016b) approved programs in China's faculty and/ or students have indicated interest and support for this project (e.g. Fujan University of Traditional Chinese Medicine/ BS – Fujan, China, Institute for Disaster Management & Reconstruction/ MS –Sichuan, China, Kunming Medical University/ BSc – Kunming, Yunnan, China, Shanghai University of Traditional Chinese Medicine/ BOT – Shanghai, China, The Capital Medical University/ BOT – Beijing, China, & West China Medical School at Sichuan University/ BOT – Chengdu, Sichuan, China). The manpower resources may be accessed for the Phase 2 – Implementation if a printed survey distribution during the educational conference is needed. Also the educational programs in China pending approval are also interested in a non-financial contribution to the project. These groups can be instrumental in Phase 1 – Planning to provide

feedback on Mandarin Chinese readability, occupational therapy cultural relevance for translation versions, and estimates on time completion during transition from draft survey to final survey format. If the virtual format is successful, then these groups will also be helpful in assisting with a snowball virtual survey distribution through alerting occupational therapy supervisors and alumni to the designated survey link and providing a personal request for reviewing the information to consider participation.

- LIH Healthcare Olivia's Place organization has offered assistance with planning and pilot testing the survey. Specifics identified have been staff feedback, professional development division collaboration, and printing if needed. LIH Healthcare Olivia's Place Beijing clinic has five specific occupational therapists that each represent a subgroup identified in the draft survey and each have agreed to be part of a virtual pilot testing process to provide feedback on the first draft version of a needs assessments. Currently, there are four clinic locations in the PRC that use occupational therapists in pediatrics. The clinics are located in these cities: Shanghai, Beijing, Kunming, and Shenzhen). Website: <http://www.oliviasplace.org/>
- LIH Healthcare Olivia's Place internal professional development document entitled *LIH Healthcare Olivia's Place Knowledge, Skills and Abilities (KSA) for Pediatric Occupational Therapists* can be used as a sample cultural competency standard in the survey development.

- Hong Kong Society of Rehabilitation (HKSR) has been active in systems level support for the introduction and proliferation of occupational therapy throughout China (HKSR, 2017). HKSR was designed as a World Health Organization (WHO) Collaborating Centre for Rehabilitation in the Western Pacific Region since 1986, and has been providing personnel training, online educational modules, and occasionally assisted with limited funding through the years. Sheila Purvis is the WHO China contact and Monique Kuo is the current Director of the International and China Division. Website: www.rehabsociety.org.hk
- Chinese Association of Rehabilitation Medicine (CARM) Occupational Therapists Group. Two of the leaders of this group have been contacted during international meetings and visits to China at which time they expressed an interest in this project. Co-investigators often are paid as subcontractors, but can share the responsibility for the intellectual contributions and collaborate with the principle investigator (Taylor, Suarez-Balcazar, Pepin, & White, 2006). A bilingual co-investigator is needed to work actively within China and is budgeted as a Chinese occupational therapy contactor to add to the scholarly content, and assist in the distribution of the work as the phases advance.

Available USA Resources

- Orlando Chinese Professionals Association is a member of the Federation Associations of Chinese Professionals in Southern USA. The organization is a registered non-profit dedicated to promote professionalism and friendship among members, to promote the science and technology exchange programs between the

USA and China, and to advance Chinese culture and positive image of Chinese-Americans. Website: <http://www.ocpa-usa.org/>

- Asian/ Pacific Heritage Occupational Therapy Association (APHOTA) is an organization within the AOTA Multicultural, Diversity, and Inclusion (MDI) Network. APHOTA is an independent group of occupational therapy practitioners committed to the mission of improved understanding of Asian/ Pacific cultural issues affecting occupational therapy practice (AOTA, 2017). The organization website has relevant data related to Asian American general cultural attributes, health and healthcare trends and demographics, and practitioner content that supports cultural competency through the AOTA Cultural Competency Tool Kit project. The website list contact person as Jyothi Gupta, Ph.D., OTR/L, FAOTA at jgupta@stkate.edu Website: <http://www.aota.org/Practice/Manage/Multicultural/Cultural-Competency-Tool-Kit/APHOTA.aspx>
- Pew Research Center is a subsidiary of the Pew Charitable Trust and focuses on empirically-driven research on a wide range of topics relevant to global stakeholders to understand the world's most challenging. There is a dedicated project on research related to Asian Americans that may be helpful in addressing and understanding the cultural and collectivism issues within mainland China. Website: <http://www.pewresearch.org//search> (search - Asian Americans).

Needed Resources (Budget)

A large variable influencing the budget is the travel required for the planning and dissemination phases, and depends if an in-person venue or virtual communication are used for the Focus Group and Dissemination phases. All communication for the phases can be done virtually, if necessary, which holds expenses down. However, many intercultural projects are best managed with an in-person communication approach and opportunities (Krueger & Casey, 2015). A combination of virtual and in-person focus groups are presented in an alternative budget that addresses paper survey format and travel expenses (Funding Plan B). Staffing is the other larger expense. Bilingual editors in both the USA and in China are indicated, as well as, including a program evaluation consultant particularly during the planning phase to improve the success of the sequencing and processes with multiple stakeholders involved. A statistician will also be budgeted as the complexity of the data analysis may require overseeing. And the final staffing expense is the USA-based and Chinese occupational therapy investigators allotted time.

Phase 1 - Formative Phase (Needs Assessment Survey Design)

The project begins with a contracted program evaluation consultant working with the primary investigator in order to oversee the initial phase and coordinate the stakeholders across the two continents. The preferred method will be for a virtual platform communication development and delivery method. Conveniently, there will be an event where many education stakeholders will be in attendance at their own expense. This is the Annual China Occupational Therapy Rehabilitation Education Congress held

in the fall in a location to be announced somewhere in mainland China.

For the first phase of survey design, the expenses will be associated with the focus group, editing related to survey development, and pilot testing. There are several platforms that allow for virtual group meetings that are reliable and accessible in China without VPN technology (e.g. WeChat, QQ) and some other platforms are available for intermittent intervals with the support of VPN technology (e.g. Skype, Blackboard). Although virtual communication platform is being proposed, it has been noted that live interaction is preferable for the first focus group. Therefore Funding Plan B itemizes expenses including an in-person focus group session.

Once the focus group input is processed and survey details are finalized, it will need to be translated into Mandarin Chinese and then back into English to check accuracy. The survey will need to be piloted, which can be done virtually at the LIH Healthcare Olivia's Place Beijing clinic location with their internal pool of occupational therapists at no costs. In combination with this step, will be a pilot survey with a select of bilingual occupational therapists that are also part of the focus group to assure concepts and message integrity are preserved. The final version will be formatted and any indicated adjustments by the bilingual editor. Concurrently the caregivers and families of children receiving occupational therapy in China will be surveyed for service satisfaction by the participating stakeholders that offer therapy services.

The Implementation Phase/ Survey Distribution

In this second phase, expenses for the survey distribution will depend on whether a virtual or paper delivery method is used. Either approach will have some related

production expenses. The virtual approach is the preferred and will require professional editing for formatting, word processing, and upload the final survey in English and Mandarin Chinese language versions in the selected virtual platform to be used within China. The alternative budget will address the additional expenses during the implementation phase if a paper survey is needed and make note that there will be slightly less time as the data format will not need to be uploaded to the virtual platform for participants to indicate their responses.

The Data Analysis Phase

In the third phase the data analysis costs are directly tied to the format selected. Most virtual survey platforms have an embedded data analysis function adequate for the level of review needed. However, with a paper survey a more statistically detailed analysis could be run using the Qualtrics or other available free statistical analysis programs. The alternative budget will address the increase in expenses if a paper format is used. Both formats can benefit from the input of a trained statistician due to the complexity of the survey design with layers of correlational qualitative and quantitative data. Follow up focus group meetings will be held virtually with both the professional development provider stakeholders (the *Producers*), and the occupational therapists (the *Doers*) to review and validate the survey trends and results. The needs assessment program evaluation summary report will be prepared by the primary investigator and co-investigator, then finalized by the editor.

The Dissemination Phase

In the final phase where the target is to optimize the dissemination of the needs

assessment program evaluation, survey data results, and recommendations to the stakeholders, there are several options. Again there are virtual opportunities that require none to minimal expenses. Several options are available that involve travel depending on the level of stakeholders that are the target for dissemination. For the purposes of planning, any expenses associated with travel will be included in the alternative budget (Funding Plan B).

(Virtual Survey)

ITEM	COST YEAR ONE	COST YEAR TWO
Personnel Staffing		
Program Evaluation Consultant average hourly rate: \$44/ hour – estimated at 40 hours for 1 st year (ERI Salary Expert, 2017)	\$1760	0
Bilingual Editor average hourly rate: \$30/ hour – estimated at 100 hours for 1 st year, and 20 hours for 2 nd year (ERI Salary Expert, 2017)	\$3000	0
Statistician average hourly rate \$40/ hour – estimated 10 hours for 1 st year only. (Bureau of Labor Statistic, 2016)	\$400	0
Occupational Therapy Consultant in China average hourly rate \$50/ hour -estimated (Health Cost Helper) Chinese OT Associate Researcher time to oversee the formative and implementation phase - estimated at 40 hours for 1 st year Chinese OT Associate Researcher time to oversee the formative and implementation phase - estimated at 20 hours for 2 nd year	\$2000	\$1000
Occupational Therapy Consultant in the USA – lead author average hourly rate \$50/ hour -estimated (Health Cost Helper) US based OT author time to prepare, facilitate the virtual focus group, integrate feedback, finalize survey, oversee data analysis - estimated at 80 hours for 1 st year	\$400	\$2000

US based OT author time for preparation for publications and conference submissions. - estimated at 40 hours for 2 nd year		
Program Activities		
Travel (none indicated with entirely virtual budget)	0	0
Focus Groups - 2 x the <i>Producer</i> group + 1 x the <i>Doers</i> group (delivered virtually at no costs, will record discussions if platform allows for later analysis and synthesis)	0	0
Pilot testing survey virtually	0	0
Miscellaneous Supplies (none needed with virtual survey, but included for Focus Group materials)	\$40	0
Technology and Communications		
Virtual survey program WeChat – Diaochapai with upgraded statistical analytic features for 1 st year (Graziani, 2015)	\$300	n/a
Communication (free services and platforms available on primary mobile phone and computers for international focus groups and communication between Chinese, USA OT collaborators) WeChat, Whats App, Skype, & Facebook IM	0	0
Data Analysis (including in virtual platform)	0	0
Dissemination Expenses		
Dissemination activities (no costs with entirely virtual budget) Submit to OT professional journals (e.g. WFOT Bulletin, Occupational Therapy International, and AJOT for publication Post on Research Gate Include in Websites: LIH Healthcare Olivia’s Place (open access) AOTA OT Connections (members only) WFOT OTION portal (members only).	0 0 0	0 0 0
Annual Subtotals	\$11,500	\$3,000
TOTAL		\$14,500

Table 5.1. Funding Plan A

(Paper Survey, Professional Conferences & Additional Travel Related Expenses)

ITEM	COST YEAR ONE	COST YEAR TWO
Personnel Staffing		
Program Evaluation Consultant average hourly rate: \$44/ hour – estimated at 40 hours for 1 st year (ERI Salary Expert, 2017)	\$1760	0
Bilingual Editor average hourly rate: \$30/ hour – estimated at 100 hours for 1 st year, and 20 hours for 2 nd year (ERI Salary Expert, 2017)	\$3000	0
Statistician average hourly rate \$40/ hour – estimated 10 hours for 1 st year only. (Bureau of Labor Statistic, 2016)	\$400	0
Occupational Therapy Consultant in China average hourly rate \$50/ hour -estimated (Health Cost Helper) Chinese OT Associate Researcher time to oversee the formative and implementation phase to co-facilitate focus group, perform as bilingual recorder during session, translates and transfers survey responses & data to Excel file, and translate reports for dissemination to key stakeholders in person as able to schedule-estimated at 80 hours for 1 st year Chinese OT Associate Researcher time to oversee the formative and implementation phase - estimated at 20 hours for 2 nd year	\$4000	\$1000
Occupational Therapy Consultant in the USA – lead author average hourly rate \$50/ hour -estimated (Health Cost Helper) US based OT author time to prepare, facilitate the virtual focus group, integrate feedback, finalize survey, oversee data analysis - estimated at 80 hours for 1 st year US based OT author time for preparation for publications and conference submissions. - estimated at 40 hours for 2 nd year	\$4000	\$2000
Program Activities		
Travel for US based OT to China (average of low cost non-refundable carrier to main airline carrier with cancelation options \$700 to \$3400 = average \$2050) Formation & Implementation phases includes round trip flight from Orlando to Beijing for 1 st year	\$2050	\$2050

Analysis & Dissemination phases includes round trip flight from Orlando to Beijing for 2 nd year		
Housing, Food and within China transportation (estimated average costs at \$250/ day for 1 week based upon LIH Healthcare Olivia's Place expense formula) US based OT time for Formation & Implementation phases estimated 1 week for 1 st year US based OT time for Analysis & Dissemination phases with stakeholders estimated 2 weeks for 2 nd year	\$1750	\$3000
Focus Groups In-person 1 x with the <i>Producer</i> group location with virtual feed access for remote participants refreshments (estimated \$5/person with up to 10 participants including 2 collaborators) Virtually 1 x with the <i>Producer</i> group + 1 x the <i>Doers</i> group (delivered at no costs, will record discussions if platform allows for later analysis and synthesis)	\$100 \$50 0	0 0 0
Survey Printing (includes paper & copying for 200 sheets)	\$40	0
Pilot testing survey at clinic refreshments (estimated \$5/person with up to 10 participants including 2 collaborators)	\$50	0
Supplies & miscellaneous (pens to complete surveys, paper for printer for reports, etc.)	\$50	\$50
Technology and Communications		
Communication (free services and platforms available on primary mobile phone and computers for international focus groups and communication between Chinese, USA OT collaborators) WeChat, Whats App, Skype, & Facebook IM	0	0
Data Analysis SPSS student download Free student use for Qualtrics or Google analytics if available and appropriate	\$40 0	0
Paper Survey Expenses Subtotal	\$17,290	\$8100
Dissemination Expenses (Includes in-person presentations at occupational therapy conferences and virtual submissions)		

China Occupational Therapy Rehabilitation Education Congress (COTREC) 3 days held annually in November in 2017 & 2018 with location TBD.	0	\$600
Travel for Chinese OT Associate Researcher to present results		
Housing/ food for Chinese OT Associate Researcher during conference (estimated average costs at \$250/ day for 3days based upon LIH Healthcare Olivia's Place expense formula)	0	\$750
COTREC Conference Subtotal	0	\$1350
American Occupational Therapy Association (AOTA) conference held annually in April in Salt Lake City, UT in 2018.		
Travel for US based OT Author to present results round trip MCO to Salt Lake City	0	\$250
Housing/ food for US based OT Author during 3 day conference		\$600
Registration fees.		\$525
AOTA Conference Subtotal	0	\$1375
World Federation of Occupational Therapists (WFOT) congress held every 4 years coming up in 2018 in Cape Town, South Africa to present results	0	\$2000
Travel for both US based OT Author (~\$1300) and Chinese OT Associate Researcher (~\$700)		\$800
Housing/ food for both US based OT Author and Chinese OT Associate Researcher during 4 day conference (rooms @ \$100/night)		\$1300
Registration fees for both.(US high economy ~\$900/ China middle economy ~\$400)		\$300
Visa fees for both if indicated.		
WFOT Conference Subtotal	0	\$4400
Annual Category Subtotals	\$17,290	\$15,225
TOTAL		\$32,515

Table 5.2. Alternative Funding Plan B

NAME OF POTENTIAL FUNDING SOURCE	PHASE UTILIZED	RANGE OF FUNDING
<ul style="list-style-type: none"> <i>The Asia Foundation</i> undertakes grant making with organizations and select travel initiatives as a collaborative process of problem identification and strategic planning within four areas of programming interest: Governance and Law, Women’s Political Participation, Economic Reform and Development, and Regional Relations. Although this organization does not award grants to individuals, the CARM OT Group Subcommittee may be interested in co-sponsoring this initiative and applying for this grant. Website: http://www.asiafoundation.org/ 	All phases	Non specific
<ul style="list-style-type: none"> <i>The Chiang Ching-kuo Foundation for International Scholarly Exchange</i> mission is encouraging scholars at academic institutions throughout the world to undertake research projects in the humanities and social sciences with focus on Chinese culture and society, as well as engage in international cooperation and exchange with available grant and fellowship funding. Website: http://www.cckf.org/en 	All phases	\$500,000
<ul style="list-style-type: none"> <i>National Institute of Health (NIH)</i> National Center for Advancing Translational Science (NCATS) gives priority to resources and projects that catalyze innovation in translational science and enable the biomedical research community to realize the potential of science to deliver tangible improvements in human health. Website: https://ncats.nih.gov/funding/open <i>F-32 – applied research/ then K towards</i> <i>K-99-ROO</i> <i>K-01 pivot award towards junior faculty with academic mentor in mind</i> 		
<ul style="list-style-type: none"> <i>Fulbright Specialist Program</i> sends U. S. professionals and faculty to provide their expertise as consultants on curriculum, faculty development, institutional planning, and related subjects at academic institutions abroad for short periods of 2 – 6 weeks. Hong Kong Polytechnic University has a current program available and may be a consideration for the dissemination phase of the 	Dissemination phase	

<p>project. Website: https://fulbrightspecialist.worldlearning.org/</p>		
<ul style="list-style-type: none"> • <i>Global Philanthropy Foundation Database</i> provides a database of foundations and grant makers with a pending feature for the addition of Southeast Asia. China has a growing number of new philanthropic activity with the rise in new onset wealth with potential to be interested in funding the technology for a virtual platform delivery, data analysis or website design to disseminate content for viewing within China and abroad. Website: http://www.synergos.org/globalphilanthropy/databas e/index.htm 	All phases	
<ul style="list-style-type: none"> • International Service organizations provide funding opportunities to promote international understanding with travel exchanges opportunities and non-specific grants • <i>Rotary Foundation</i>, specific option(s) to apply to would be: the Peace Fellowship, or Global Grant Scholarship, or may contact a local Rotary Club for personal funding on project. Website: https://www.rotary.org/ • <i>Lions Club International Foundation</i>, specific option(s) to apply to would be Designated Grants as Humanitarian Award requires a member nomination and is more limited in scope. Website: http://www.lcif.org/ • <i>Kiwanis International</i>, appears limited to charity organizations with specific option(s) to apply to would be for the Children’s Fund. Downloadable resources are available to assist with general grant writing submissions. Website: http://www.kiwanis.org/childrensfund 	All phases	
<ul style="list-style-type: none"> • <i>Dudley Allen Sargent Research Fund (DASRF) Doctoral Student Competition</i> provides financial assistance to Sargent College students involved in areas of research that results might be diluted due to lack of funding in order to provide seed money. Website: https://www.bu.edu/sargent/research/research-administration/dudley-allen-sargent-research-fund/ 		

<ul style="list-style-type: none"> • <i>BU Women's Guild</i> is an organization for men and women, faculty, staff, trustees, overseers, and friends of BU to socialize and join together. The scholarship fund is for women 30 years and over who are graduate students at BU. who are enrolled in Boston University graduate programs. Deadline for 2017 is February Website: http://www.bu.edu/womensguild/scholarships-awards/ 	All phases	
<ul style="list-style-type: none"> • <i>Altrusa International of Lake County</i> is a philanthropic women's organization located in Leesburg, Florida in Lake County. The scholarships are variable for local women who need further education and/ or training to enter or re-enter the workforce. Website: http://www.altrusalakecounty.org/ 	Formation phases	\$500

Table 5.3. Potential Funding Sources

ORGANIZATION	TASK OR RESOURCES
<p>Make Change! Trust Website: http://www.mikemann.com/about/ Make Change! Trusts is a charitable fund developed by Internet entrepreneurs and philanthropists devoted to using technology to improve the world. MC!T makes donations to nonprofit organizations that are empowering other nonprofits and the underserved through innovative uses of technology.</p>	<p>May be able to donate IT staff for survey or web design.</p>
<p>Worldwide Initiative for Grant maker Support (WINGS) Website: http://www.wingsweb.org/ A network of over 40 grant maker support organizations around the world, which have joined together to create opportunities to learn from and support one another, develop modes of communication and collaboration and contribute to the strengthening of philanthropy worldwide. Sponsored by the Council of Foundations. Also provides an ever-expanding network of organizations participating in Wings, many of which give out funding or funding information.</p>	<p>May be able to assist with grant proposal writing and review prior to submission, also may help identify new resources for grants for this project.</p>
<p>United Nations Development Fund for Women (UNIFEM) Website: http://www.unwomen.org/en UNIFEM promotes women’s empowerment and gender equality. It works to ensure the participation of women in all levels of development planning and practice, and acts as a catalyst within the UN system, supporting efforts that link the needs and concerns of women to all critical issues on the national, regional and global agendas.</p>	<p>May be resource for dissemination as pediatric occupational therapy staff development may need to be provided in undeveloped and more remote areas of China.</p>
<p>Association for International Practical Training (AIPT) Website: http://www.aipt.org AIPT is a non-profit organization that promotes international understanding between the U.S. and other countries through on-the-job practical training exchanges for students and professionals.</p>	<p>May be a resource for funding for US OTR or academics to go to China for training of Chinese OT’s in pediatric methods after survey results identify prioritized topics.</p>

Table 5.4. Other, resources that may have related services or funding potential

Conclusion

The proposed needs assessment of pediatric occupational therapists working in mainland China will be most effective with multiple stakeholder collaboration. The expenses are reduced if a virtual platform is successful in all phases of the project and should run less than \$15,000 if uncomplicated (\$11,500 the first year, and \$3000 the second year). However, if a paper survey is necessary, expenses will be increased due to manpower, printing, travel & living expenses. The paper version budget will be \$ 17,290 in the first year, and \$8100 the second year. The in-person dissemination opportunities that involve conference presentations could represent a substantial portion of the high end of expenses in the second year (COTREC \$1,350; AOTA \$1375; and WFOT for both OT investigators is \$4400). Funding sources varying depending on the lead researchers affiliations. It would be prudent to identify a co-investigator applicant who has Chinese academic and non-profit foundation affiliations as a co-investigator.

CHAPTER 6: DISSEMINATION PLAN

Description of the proposed program

The proposed needs assessment survey will collect quantitative and qualitative data on self-reported learning needs, perceptions of support or barriers to professional development, Likert scale level of satisfaction with current resources for educational development through focused multimedia opportunities within China. The information can assist both western and Chinese-based stakeholders involved in occupational therapy professional development programming that promote occupational therapy competency in pediatric practice. Based upon the KtA cycle described previously in Chapter 2 and Graham et al. (2006), it is imperative to engage the occupational therapists in monitoring the processes of knowledge translation and usage. The proposed needs assessment survey will gather information in the local context, clarify the perceived barriers, and assist in tailoring and implement professional development efforts as a planned intervention itself.

The primary goal is providing the needed evidence-based practice (EBP) therapy for children and families who live in the People's Republic of China (PRC) and indirectly supporting occupational therapy as a stand-alone sustainable globally connected healthcare profession within mainland China. This information can play a critical role in providing details during each of the program evaluation phases for aligning a more needs-based process in planning western and Chinese learning activities and academic exchanges.

This dissemination plan describes the role of diffusion sequence from three

distinct segments (e.g. formative phase, the implementation and data analysis phase, and the final dissemination phase) to get engagement throughout and utilization of the resulting survey data information. The first dissemination focus is to gather the key stakeholders to refine and continue collaboration through a focus group to develop pilot and then implement the last Needs Assessment Survey. The second dissemination focus is to enlist the occupational therapists as participants in completing the survey to establish a significant number of the reported 100 self-identified occupational therapists working in mainland China. The third and final dissemination focus is to share completion of the survey data analysis and program evaluation summary with all target audiences.

Dissemination Goals

The dissemination plan has long- and short-term goals. The long-term goals focus on the point once the entire needs assessment survey and program evaluation processes are completed. The short-term goals address the series of needs during the three intervals of dissemination beginning with the development, then the implementation, and finally to the program evaluation dissemination.

Primary Audience: The audience is the pediatric occupational therapists working in mainland China (the *Doers*) who want to improve their competency from entry-level novice clinician to the mastery level expert. By participating in the survey and having access to the results, therapists can gain a better understanding of their learning needs, the current evidence-informed factors guiding global pediatric practice, and have a voice in indicating their unique learning needs and preferences to the professional development stakeholders.

Secondary audience

- The caregivers and families whose children receive occupational therapy services in mainland China (the *Receivers*) and want the best outcomes for their children from therapy services.
- The stakeholders who want to support or provide professional development trainings or products that lead to improving occupational therapy services for children and families in the PRC (the *Producers*). These six include:
 - *Chinese employers* - Employers of pediatric occupational therapists in China who, may either approve external professional development or provide internal training to their staff.
 - *Chinese OT programs* - OT academic programs in China providing professional development content to occupational therapists.
 - *WFOT/foreign OT programs* - WFOT and Foreign OT academic programs addressing promotion of occupational therapy and professional development in China.
 - *CARM Occupational Therapists Group* - A subgroup working on governing policies and practice standards for a legally recognized and internationally approved Chinese Occupational Therapy Association and best practice in the PRC. This group participates work group activities for to produce documents for occupational therapy in China, in policy and regulatory policies as indicated, and identification of guest speakers and topics for professional meetings, conferences, and training.

- *Bicultural OT Educators* - Chinese bilingual educators with lived experience in western countries who provide professional development post entry-level trainings. These individuals often have multiple roles outside of their teaching.
- *PD businesses & NGO* - Businesses or non-government organizations involved or interested in providing occupational therapy professional development.

Long-Term Goals (3-4 years)

1. To increase the number of knowledgeable and skilled occupational therapists specializing in pediatrics in mainland China
2. To develop a stakeholder needs-based educational programming change in pediatrics to occupational therapists in mainland China

Short-Term Goals (9 months – 3 years)

Formative phase (9 – 12 months).

- a. Greater than 90% of identified audiences are informed of the project either virtually or in writing within 3 months from the planned Focus Group first meeting.
- b. Eight to ten individuals are identified from the professional development stakeholders *Producers* group, contacted, and indicate a commitment to participate in the project Focus Group, and processes through the duration of the OTD long-term program evaluation to be completed within the first 9 months.

- c. Employers of occupational therapists are provided a bilingual project factsheet, customer satisfaction survey PDF, and email blast invitation link to forward to their families of children receiving occupational therapy services in mainland China. The survey is to be completed within 30 to 60 days of provision of survey content.

Implementation & data analysis phase (1 – 2 years).

- a. Greater than 90% of pediatric occupational therapists working in mainland China have received a virtual or in person invitation to participate in Final Needs Assessment Survey within 30 days of launch survey link.
- b. The pre-established response rate number of pediatric occupational therapists working in mainland China have agreed to participate and completed the survey within 30 days after the launch of the survey.
- c. The professional development stakeholders *Producers* group are provided an edited initial survey data report entitled the *Producers Stakeholder Summary Report* within 60 days of launch of survey.
- d. Greater than 90% of the established *Producer* Focus Group were contacted by the US based author and Chinese co-investigator (s) directly or participated in a virtual group to address input on survey data results and process reflections to be included in the final program evaluation report within 120 days of the initiation of the survey.

Final dissemination phase (2-3 years).

- a. To check the survey's effectiveness, all the identified professional

development providers are sent an electronic communication within 90 days after project completion asking two yes/no forced choice 1) if they have already made changes based upon the survey process, and 2) are they planning to incorporate the final program evaluation recommendations within the next year. Success will be measured by greater than 50% yes responses on both questions, indicating implemented changes implemented or are planning to make changes recommended in survey executive summary respectively.

- b. Employers of occupational therapists will be provided the *Producers Stakeholder Summary Report* and have the opportunity to discuss with their occupational therapists 30 days prior to the planned WeChat session lead process group session for occupational therapists to honor traditional role of employer communication prior to outside source.
- c. A WeChat virtual meeting occurs within 90 days after project completion with email blast notice sent to all the pediatric occupational therapists working in mainland China to inform therapists, and gather follow-up content on changes. The US based author and Chinese co-investigator will review the survey data results, and request completion of a short survey regarding whether their professional development learning needs showed improvement through one of the professional development provider subgroups.
- d. The project final study reports, documents, and resources are complete within 9 – 12 months after the close of the survey, and all identified stakeholders are

sent a virtual notice with PDF's available upon request from the US based author and Chinese co-investigator.

Key messages

To successfully achieve long-term changes in the development of pediatric occupational therapy services in the PRC, the following key messages must be clearly articulated to each audience at the appropriate interval where change behavior is indicated.

- For occupational therapists, the *Doers* - (Primary audience)
 - Survey participation and final results helps to exchange information with professional development providers on preferences, interests, and learning needs to support choice in trainings that promote clinicians' best ability to deliver competent services and grow as globally connected occupational therapists.
- For families and caregivers, the *Receivers* - (Secondary audience)
 - The survey helps to increase the number of knowledgeable and skilled occupational therapists specializing in pediatrics in mainland China.
- For professional development stakeholders, the *Producers* - (Secondary audience)
 - The professional development stakeholders' group is complicated as some stakeholders will be involved at different points of the dissemination plan. All of these stakeholders need to know their input is valued along the processes to engage effectively, spread, exchange, and implement the collaborative, evidence-based survey results in the knowledge translation

cycle. Their participation in the process facilitates and develops a stakeholder needs-based educational programming change in pediatrics to occupational therapists in mainland China

- *Employers of pediatric occupational therapists in China* benefit from being engaged in the Focus Group, having an interest in utilizing, and implementing the survey results with their professional development offerings. This action validates their staffs' preferences and needs expression and is anticipated to translate into improvements in quality of therapy services, client outcomes, and all groups' satisfaction.
- *OT programs in China* are providing professional development content benefit from this evidence-based survey that provides pediatric occupational therapy practice profile within the Chinese context and once suggestions are implemented can support attendees of their courses to meet advanced competencies.
- *WFOT and Foreign OT academic programs* benefit from the evidence-based survey as it provides intrinsic data on clinicians learning needs working in mainland China for planning collaborations with other key stakeholders addressing professional development in mainland China.
- *CARM OT subgroup* benefits from the active exchange of information throughout this project and will be provided relevant

evidence-based information that will help provide choice for clinicians working in China, and improve the quality of professional development program offerings if survey data and recommendations are utilized and implemented.

- *Bicultural occupational therapy educators* benefit from participating in the exchange of information on a micro and macro-level as a point of encouraging occupational therapists to complete the survey, and then as source for advocacy with the utilization and implementation of survey results across contexts and language barriers.
- *Businesses or non-profit organizations (NGO's)* benefit from engaging, spreading, utilizing, and implementing the collaborative evidence-based survey of pediatric occupational therapists working in mainland China.

The market for therapy continuing education is growing as rehabilitation expands trying to catch up with the PRC's Five Year Plan of *Rehabilitation for All*. The survey data recommendations will help employers without dedicated resources for clinician continuing education to make the best investment to help their therapists meet their learning needs. The Chinese Universities are just developing their programs and often have limited funding to pay foreign experts to travel for focused professional development training for graduates. However, it may be more efficient for an

entrepreneurial business to address the specific program summary recommendations as an investment opportunity.

Sources or Messengers

The networks and motivation to develop internal mechanisms for educating, monitoring, and supporting occupational therapy can be complicated. The knowledge, skills and positive attitudes to promote the professional of occupational therapy needs to be valued to advance occupational therapy as a recognized stand-alone component of the PRC. The leaders in the Chinese Occupational Therapy group and the seasoned occupational therapist are the best messenger for the utilization and implementation of ongoing evidence in best practice. Several organizations have recognized champions of occupational therapy that are bilingual and bicultural with Chinese and Western cultures.

- To address the occupational therapist:
 - LIH Healthcare Olivia's Place occupational therapy leads: The clinic staff contain a representative from each of the category groups and will have the opportunity to participate in both a pilot survey and the final survey. Several bilingual Taiwanese occupational therapists have expressed an interest in this project already, and have lived abroad where they have blend eastern and western culture effectively.
 - CARM OT subgroup: Most of the Chinese occupational therapists in leadership roles in the CARM Occupational Therapists group received their occupational therapy education outside mainland China and have

clinical experiences within China to validate clinicians (Hermes, et al., 2016).

- To address the professional development stakeholders:
 - CARM Occupational Therapists group member: Two individuals are actively teaching at several Chinese occupational therapy programs and have dual training in Chinese medicine and received their occupational therapy training at Hong Kong Polytechnic University which has a unique role in understanding the variety of Chinese and foreign stakeholders (Sinclair & Cao, 2016).
 - Employers of pediatric occupational therapists in China: The current CEO of the LIH Healthcare Olivia's Place system is bilingual and experienced in research and development. He is also a parent of a child that has benefitted from occupational therapy and would be able to present communicate throughout all stages of the dissemination processes (LIH Healthcare Olivia's Place, 2013).

Dissemination Activities

Dissemination steps and sequence.

The Formative Phase:

- a. A Focus group will be formed of 8 – 10 Key stakeholders from the Professional Development stakeholders *Producers* group. This group will meet as a Focus Group to reach consensus for discussion about the overall program plan, objectives, methods, and clarifying this doctoral

project proposed Needs Assessment Survey version for additional culturally relevant input to modify the survey accordingly.

- b. A Pilot sampling group (6 – 10 participants) 2 from the subgroup of *Producers* Focus Group that are pediatric occupational therapists themselves are added to a convenience sampling of 4 – 8 occupational therapists at LIH Healthcare Olivia’s Place clinics to complete the modified Needs Assessment Survey to estimate completion time, readability, and potential content validity.
- c. Analysis of the piloted survey will be completed and any required adjustments made resulting in a final Needs Assessment Survey.
- d. Announcement through the Chinese social media network (e.g. QQ and WeChat) will be made to spread the message to the target audience of pediatric occupational therapists of upcoming final Needs Assessment Survey goals, dates and participation opportunities.
- e. Gather baseline Likert-scale satisfaction survey data from the families that are currently using occupational therapy services in mainland China on key measures: costs, timeliness of services, matched expectations, and overall satisfaction)

The Implementation Phase:

- a. *CARM Occupational Therapists group & Bicultural OT Educators* will use their preferred electronic and live communication methods to engage and initiate a snowball convenience sampling to spread the

message to occupational therapists working in pediatrics to participate and complete the final Needs Assessment Survey within 30 days of launch survey link.

- b. The *Producers* Focus Group selected communication methods will be implemented to achieve a sufficient pre-determined number of participants to meet a confidence level of $<.05$ in the number of respondents that complete the final Needs Assessment Survey within 30 days of launch survey link.
- c. The US based author and Chinese co-investigator (s) will host WeChat sessions to explain without directly influencing responses for occupational therapists that need more assistance to complete the virtual final Needs Assessment Survey.

The Data Analysis Phase:

- a. Repeat Likert-scale satisfaction survey of the families that are currently using occupational therapy services in mainland China on key measures to determine if increasing awareness of topics through the final Needs Assessment Survey has impacted occupational therapists quality of care as perceived by consumers.
- b. Lead author will disseminate a summary of embedded statistical analysis reports from the selected virtual delivery platform and further statistically software program (e.g. WeChat - Diaochapai) of data and responses with the Focus Group

- c. The Focus Group will re-convene and participate in a discussion for analysis of trends in data, processes and suggestions to be included in a final program evaluation summary by lead author.
- d. Results of data analysis and Focus Group re-convening meeting are released in a process summary report to the Professional Development Producers to choose to utilize and implement.
- e. Within six months after Professional Development Producers have received the process summary report, the US based author and Chinese co-investigator will convene a WeChat session to host a convenience sample group of pediatric occupational therapists exchange discussion on preliminary survey data results and repeat completing the final Needs Assessment Survey to measure if they have noted change in their learning needs being met or other factors. These perceptions and comments will be included in the Program Evaluation Summary.
- f. Within six months after Professional Development Producers group have received the process summary report, a repeat Likert-scale satisfaction format of the families that are currently using occupational therapy services in mainland China on key measures will be attempted. This information will help to determine if any additional changes in perceptions of quality of occupational therapy services have occurred after 3-6 months of preliminary information being provided to the Professional Development Producers.

- g. Final review of all content and program evaluation is undertaken and completed by lead author.

The Final Dissemination Phase:

- a. The Program Evaluation Summary will be distributed to the occupational therapists working in pediatrics in mainland China and the secondary audiences in methods that match their respective levels of stage of change (Froyd, 2001; Merrian, 2001)
- b. Website development and completion with all written dissemination documents uploaded.
- c. Planned submission to conferences, journals are completed.

The Summary Statements Dissemination Activities.

(See Appendix K – Dissemination Activities Matrix)

Formative phase.

- The target audience for this phase is a select subgroup of stakeholders that are considered the players (those that have both interest and power). These include the Chinese employers, CARM OT group, and a few foreign OT academics that are also bilingual educators in China for the Focus Group.
 - Electronic media (e.g., email message blast, social media specifically through Facebook IM and WeChat invitation to participate in the Focus group with a brief explanation or PDF of the Factsheet)
 - Person-to-person contact (e.g., invitation to participate and schedule accordingly at a conference, a workshop, or a meeting).

Implementation and data analysis phase.

- The target is the pediatric occupational therapists, but some secondary audience groups (e.g. bilingual OT educators and CARM OT group) will be enlisted to spread and assist in engaging full target audience participation.
 - Written information (e.g., fact sheet at conferences and meetings)
 - Electronic media (e.g., email blasts, social media invitations and campaign to tag the next person to complete the survey with a social media badge or graphic on WeChat, messages, and podcast on QQ)
 - Person-to-person contact (e.g., CARM or bilingual educators may invite to participate and share the survey link).

Final dissemination of program summary

- This is the phase that involves all the audiences and occurs after the data analysis with full program evaluation summary is written and completed.
 - Written information (e.g., Factsheet, Executive Summary brief, journal article in Chinese, OT Association publication in the South Pacific, USA, UK, Australia & Canada; and peer-reviewed International OT publications such as *Occupational Therapy International* or the *WFOT Bulletin*)
 - Electronic media (e.g., website resource content and blog, WeChat and QQ educational sessions for dissemination of results)

- Person-to-person contact (e.g., COTEC/ AOTA/ WFOT)

Budget

The priority of the project is to inform and engage the pediatric occupational therapy practitioners working in mainland China and the professional development producer groups about evidence based content to address the self-identified preferences and learning needs of clinicians. The utilization and implementation of the knowledge gained from the Needs Assessment Survey will improve the choice in professional development opportunities that meet the self-identified needs of occupational therapists to promote the life-learning path eventually to an expert, if the clinician so desires.

The priorities of the dissemination plan and budget related to these activities are as follows:

Person to Person: The priority is to support the engagement of the Focus Group to refine and complete the Needs Assessment survey, so it is ready for the next phase of implementation.

Electronic Media: The priority is for social media management aimed at participant engagement, Survey distribution on WeChat survey platform (e.g. Diaochapai), and the program evaluation dissemination through the key stakeholder's websites that share summary & blogs posts, and WeChat discussion after program evaluation results are released to improve utilization, implementation, and provide technical assistance as indicated.

Written material: The priority is the author's facilitation, analysis and writing time and Chinese occupational therapy collaborator consultation time to draft, edit and

submit journal and conference abstracts is factored in as consultation fee at each phase.

The costs for the dissemination are outlined in Chapter 5 (Table 5:3) and include the AOTA and WFOT Congress expenses. These are summarized below in Table 6.1 and Table 6.2.

Budget Item	AOTA Conference*	COTREC Conference *	WFOT Conference **
Registration	\$550.00	n/a	\$1300.00
Air Travel	\$250.00	< \$600	\$2000.00
Lodging and Meals	\$600.00	\$750	\$800.00
Visa fee	n/a	n/a	\$300.00
Conference Total	\$1375.00	\$1350	\$4400.00
Total Dissemination Costs:			\$7125.00

Table 6.1. Person to Person Program Dissemination Expenses

*funding for one OT author that lives in the country of the conference

**includes combined costs for both Chinese and USA authors to travel to location

Budget Item	Cost	Total
Virtual dissemination WeChat survey & statistics package (e.g. Diaochapai) \$25 x 12 months	\$300.00	\$300.00
Written dissemination Bilingual editor	\$3000.00	\$3000.00
Chinese COTREC conference	\$1350.00	\$1350.00
AOTA conference	\$1375.00	\$1375.00
WFOT conference (2 participants)	\$4400.00	\$4400.00
Subtotals		
Dissemination costs	Staffing + Diaochapai	\$3300.00
	Professional conference x 3	\$7125.00
TOTAL		\$10,425.00

Table 6.2. Total Program Dissemination Expenses

The majority of the dissemination activities are undertaken virtually after the convenience live focus group is completed. WeChat is a free service, however, to use the survey analytics on a laptop, requires access to a higher service platform called Diaochapai (Graziani, 2015). Using the Diaochapai embedded statistical analysis features will be a considerable time saver and aid in rapid turn-around to process the survey data results. The current estimate is to only use the Diaochapai service for the 12 months that the survey communications and analytics are indicated. The bilingual editor will help to assure quality in the report writing and consistency in messages across documents. The remainder of the dissemination activities requires time for submissions and monitoring communications with the majority of the expenses directly tied to

acceptance and costs of occupational therapy conferences. The proposed budgets for travel, housing, food, registration and miscellaneous costs are in Table 6.2. The primary audience changes based on the interval of dissemination, but most of the expenses fall at the final phase.

Evaluation

The evaluation of the success of the dissemination efforts will be measured as follows:

- Tracking the number of participants that complete the Needs Assessment Survey
- Tracking social media interaction through WeChat - Diaochapai statistics, attendance on WeChat schedule sessions for the dissemination of data analysis and program evaluation summary, & monitoring WFOT OTIONS responses
- Number of additional providers of professional development activities and courses that match the self-identified needs of the occupational therapists from the survey results
- Number of participants who attend the conference sessions
- Number of professional written submissions that are accepted and published.

Conclusion

The dissemination activities outlined in this project are broad and allow for tailoring to incorporate the results of the survey to guide the dissemination plan. The greatest investment other than staffing expenses during an episode is during the dissemination phase of the project. However, it has the largest potential to create a ripple effect in utilization and implementation as individuals feel empowered, have their adult

learning needs respected, acknowledged and met to support transitioning to the best clinical expert they can be with global supports.

CHAPTER 7: CONCLUSION

This paper explores the challenges faced currently in mainland China for occupational therapists with professional development. From Chapter two the following issues have been identified: variations in primary spoken and printed language that is different from English or Simplified Mandarin Chinese, occupational therapists coming from various levels of occupational therapy academic preparation, often vastly different client backgrounds throughout mainland China, and variability in access to professional resources depending on the geographic region, inconsistencies in Internet access and technology, and the emerging status of occupational therapy as a consistently recognized stand-alone profession throughout China.

Occupational therapy began through the efforts of a combination of several local dedicated Chinese clinicians, emerging therapy businesses, and efforts of select groups outside China's mainland. Currently, the national occupational therapy organizational efforts are under a subcommittee of the Chinese Association of Rehabilitation Medicine (CARM). These efforts have received support from the WFOT and some established international occupational therapy stakeholders (AOTA, 2014a; Brandt et al., 2014; Lin, 2014; Mu et al.; Sinclair, 2014). The context of this program is the evolving healthcare landscape and complex forces at play in all the identified audiences related to occupational therapists learning needs in the PRC today. Government policies and economic opportunities in the PRC shifted in the past two decades providing an opening for more Western-based healthcare and collaborations (LeDeu, Parekh, Zhang, & Zhou, 2012; Sinclair & Cao, 2016).

The potential significance of this doctoral project for the area of pediatric practice goes beyond just developing country settings but also includes content about maintaining competency and transitioning from novice entry-level clinician towards that of an advanced skill expert in any country. The WFOT materials were combined with an English language literature search on competency and international pediatric profile best practice content and undertaken by a pediatric AOTA board certified expert clinician to guide this innovation. This doctoral project body of work can help many stakeholders to by-pass the early search steps to identify what is most salient from within this paper for their initiative. These stakeholders can save time and resources by starting with several of the already culturally aware and published research studies on pediatric best practice evidence summarized and cited in this doctoral project.

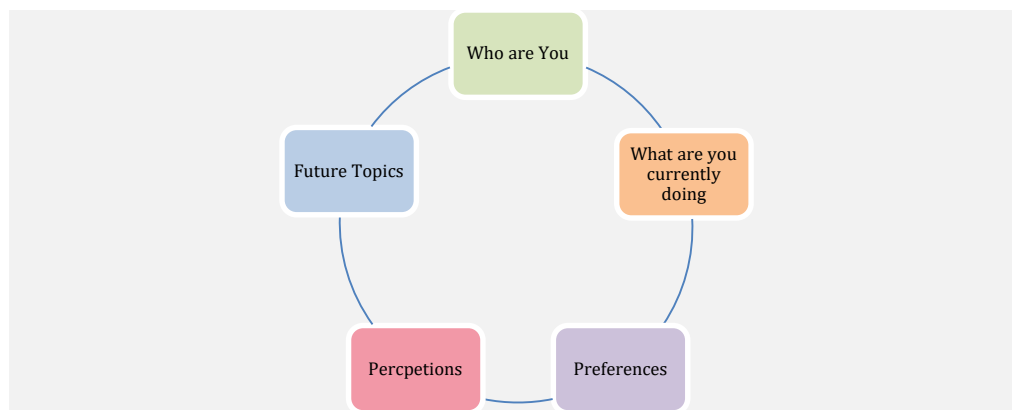
The impact of understanding the learning needs of the target audience of pediatric occupational therapists working in mainland China who want to improve their competency from entry-level novice clinician to the mastery level expert is significant. By participating as a stakeholder in the survey and having access to the results, therapists can gain a better understanding of their learning needs and have a voice in indicating their unique learning needs and preferences to the professional development stakeholders.

The program planning questions that impact a developing country or a setting where pediatric occupational therapists have unmet learning needs are presented here and serve to enhance the professional of occupational therapy as systems level community-based response. The race to provide a quick solution is helped by the investment of the literature search and the resulting program evaluation plan containing a proposed needs

assessment survey and support materials in this project. As occupational therapy globally continues to strive to be evidence-based and informed of international issues and needs, this paper represents a step forward in looking at systems level needs in context.

APPENDIX A: PROPOSED NEEDS ASSESSMENT SURVEY

Needs Assessment Survey of Pediatric Occupational Therapists in Mainland China



1) Who Are You

Question 1.1: Age group?	<input type="checkbox"/> 18 – 25 years <input type="checkbox"/> 26 – 30 years <input type="checkbox"/> 31 – 35 years <input type="checkbox"/> 36 – 40 years <input type="checkbox"/> 41 – 45 years <input type="checkbox"/> 46 – 50 years <input type="checkbox"/> Over 51 years
Question 1.2: Gender?	<input type="checkbox"/> Male <input type="checkbox"/> Female
Question 1.3: Where are you from?	<input type="checkbox"/> Mainland China <input type="checkbox"/> Taiwan <input type="checkbox"/> Hong Kong <input type="checkbox"/> Overseas : ○ Specify _____
Question 1.4: Years working as OT?	<input type="checkbox"/> < 1 years <input type="checkbox"/> 2 – 4 years <input type="checkbox"/> 5 – 9 years <input type="checkbox"/> 10 – 14 years <input type="checkbox"/> > 15 years

<p>Question 1.5: Education Details</p> <p>Highest level of education in any field you have completed?</p>	<input type="checkbox"/> Associate <input type="checkbox"/> Diploma <input type="checkbox"/> Bachelors <input type="checkbox"/> Masters <input type="checkbox"/> Doctorate
<p>Question 1.6: Education Details</p> <p>What level was your entry level OT education program?</p>	<input type="checkbox"/> Associate <input type="checkbox"/> Diploma <input type="checkbox"/> Bachelors <input type="checkbox"/> Masters <input type="checkbox"/> Doctorate
<p>Question 1.7: Education Details</p> <p>Where did you get your OT education?</p>	<input type="checkbox"/> The Capital Medical University <input type="checkbox"/> Fudan University TCM <input type="checkbox"/> Institute for Disaster Management & Reconstruction (IDMR) <input type="checkbox"/> Kunming Medical University <input type="checkbox"/> Shanghai University of TCM <input type="checkbox"/> West China Medical School <input type="checkbox"/> Chinese rehabilitation therapy program, but non-WFOT approved OT program <input type="checkbox"/> Hong Kong WFOT approved OT program (Hong Kong Polytechnic University or Tug Wah College) <input type="checkbox"/> Taiwanese WFOT approved OT program (Chang Gung University, National Taiwan University, Fu Jen Catholic University, National Cheng Kung University, Chung-Shan Medical University, Kaohsiung Medical University or I-Shou University) <input type="checkbox"/> Other <ul style="list-style-type: none"> ○ Specify _____
<p>Question 1.8: Education Details</p> <p>Describe your occupational therapy courses at university?</p>	<input type="checkbox"/> How many hours were on occupational therapy? <input type="checkbox"/> What were the main topics presented?
<p>Question 1.9: Languages</p> <p>Languages you speak?</p> <p><i>(Check all that apply)</i></p>	<input type="checkbox"/> Mandarin <input type="checkbox"/> Cantonese <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Spanish <input type="checkbox"/> German <input type="checkbox"/> Portuguese <input type="checkbox"/> Taiwanese <input type="checkbox"/> Other

	<ul style="list-style-type: none"> ○ Specify
<p>Question 1.10:</p> <p>Languages you read?</p> <p><i>(Check all that apply)</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Simplified Mandarin Chinese <input type="checkbox"/> Traditional Mandarin Chinese <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Spanish <input type="checkbox"/> German <input type="checkbox"/> Portuguese <input type="checkbox"/> Taiwanese <input type="checkbox"/> Other <ul style="list-style-type: none"> ○ Specify
<p>Question 1.11:</p> <p>Languages you write?</p> <p><i>(Check all that apply)</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Simplified Mandarin Chinese <input type="checkbox"/> Traditional Mandarin Chinese <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Spanish <input type="checkbox"/> German <input type="checkbox"/> Portuguese <input type="checkbox"/> Taiwanese <input type="checkbox"/> Other <ul style="list-style-type: none"> ○ Specify
<p>Question 1.12 Work History</p> <p>Where have you worked other than your current employer?</p> <p><i>(Check all that apply)</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Hospital <input type="checkbox"/> Outpatient clinic <input type="checkbox"/> School consulting <input type="checkbox"/> Home health <input type="checkbox"/> Government Healthcare Agency <input type="checkbox"/> NGO (Healthcare, Special Education or Early Intervention) <input type="checkbox"/> Orphanage <input type="checkbox"/> Other or Non-healthcare setting <ul style="list-style-type: none"> ○ Specify

2) What Are You Currently Doing?

<p>Question 2.1: Employment</p> <p>Where do you currently work?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Hospital <input type="checkbox"/> Outpatient clinic <input type="checkbox"/> School consulting <input type="checkbox"/> Home health <input type="checkbox"/> Government Healthcare Agency <input type="checkbox"/> NGO (Healthcare, Special Education or Early Intervention) <input type="checkbox"/> Orphanage <input type="checkbox"/> Other <ul style="list-style-type: none"> <input type="radio"/> Specify _____
<p>Question 2.2: Role</p> <p>What is the current nature of your job?</p> <p><i>(Check all that apply)</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Direct client contact <input type="checkbox"/> Consultation services <input type="checkbox"/> Management & administration <input type="checkbox"/> Teaching & research <input type="checkbox"/> Other <ul style="list-style-type: none"> <input type="radio"/> Specify _____
<p>Question 2.3: General Professional Development</p> <p>Where do you currently get your occupational therapy information?</p> <p><i>(Check all that apply)</i></p> <p>2.3 Continued . . .</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Conferences, workshops or meetings <input type="checkbox"/> In person academic courses <input type="checkbox"/> Work or outside professional mentoring program <input type="checkbox"/> Informal discussions with occupational therapy co-workers or managers. <input type="checkbox"/> Study groups or journal clubs <input type="checkbox"/> Social media events or discussions (e.g. QQ or WeChat) <input type="checkbox"/> Self-paced electronic or video course

<p>Where do you currently get your occupational therapy information?</p> <p><i>(Check all that apply)</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Free instructional video or web-based video training <input type="checkbox"/> Website content or internet sites <input type="checkbox"/> Occupational therapy journals <input type="checkbox"/> Other healthcare journals <input type="checkbox"/> Books or workbooks <input type="checkbox"/> Continuing Education (CE) articles with examinations <input type="checkbox"/> Other healthcare providers pass on the information at rehabilitation meetings <input type="checkbox"/> Other <ul style="list-style-type: none"> <input type="checkbox"/> Specify _____
<p>Question 2.4: Pediatrics Training</p> <p>Where have you received occupational therapy training other than at your university to provide occupational therapy to children in China?</p> <p><i>(Check all that apply)</i></p> <p>2.4 Continued . . .</p> <p>Where have you received occupational therapy training other than at your</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Conferences, workshops or meetings <input type="checkbox"/> In person academic courses <input type="checkbox"/> Work or outside professional mentoring program <input type="checkbox"/> Informal discussions with occupational therapy co-workers or managers. <input type="checkbox"/> Study groups or journal clubs <input type="checkbox"/> Social media events or discussions (e.g. QQ or WeChat) <input type="checkbox"/> Self-paced electronic or video course <input type="checkbox"/> Free instructional video or web-based video training <input type="checkbox"/> Website content or internet sites <input type="checkbox"/> Occupational therapy journals <input type="checkbox"/> Other healthcare journals

<p>university to provide occupational therapy to children in China?</p> <p><i>(Check all that apply)</i></p>	<p><input type="checkbox"/> Books or workbooks</p> <p><input type="checkbox"/> Continuing Education (CE) articles</p> <p><input type="checkbox"/> Other healthcare providers pass on the information at rehabilitation meetings</p> <p><input type="checkbox"/> Other</p> <p style="margin-left: 20px;"><input type="radio"/> Specify _____</p>
<p>Question 2.5: Pediatrics Assessments</p> <p>Which of these assessments do you use currently?</p> <p><i>(Check all that apply)</i></p>	<p><input type="checkbox"/> VMI-6th edition (Beery)</p> <p><input type="checkbox"/> PDMS-2</p> <p><input type="checkbox"/> BOTMP-2</p> <p><input type="checkbox"/> Movement ABC-2</p> <p><input type="checkbox"/> TVPS-R</p> <p><input type="checkbox"/> MVPT-3rd</p> <p><input type="checkbox"/> SP-2</p> <p><input type="checkbox"/> SPM/ SPM-P</p> <p><input type="checkbox"/> SIPT</p>
<p>Question 2.6: Intervention</p> <p>Which of the following interventions are you able to use currently?</p> <p><i>(Check all that you are competent to use)</i></p>	<p>Occupational Therapy Intervention Skills related to:</p> <p><input type="checkbox"/> Movement</p> <p><input type="checkbox"/> Sensory processing</p> <p><input type="checkbox"/> Emotional self-regulation</p> <p><input type="checkbox"/> Cognition</p> <p><input type="checkbox"/> Communication</p> <p><input type="checkbox"/> Self-care</p> <p><input type="checkbox"/> Social/inter-personal skills</p>
<p>Question 2.7: Pediatric Diagnoses</p>	<p><input type="checkbox"/> DD - Developmental Delays</p> <p><input type="checkbox"/> LD - Learning Disabilities</p> <p><input type="checkbox"/> CP -Cerebral Palsy</p> <p><input type="checkbox"/> ASD – Autism Spectrum Disorder</p> <p><input type="checkbox"/> TBI - Traumatic Brain Injury</p>

<p>Which types of clients do you typically work with?</p> <p><i>(Check all that apply)</i></p>	<input type="checkbox"/> Down Syndrome <input type="checkbox"/> Other neurologic disorders <input type="checkbox"/> Other genetic disorders <input type="checkbox"/> Others not mentioned ○ Specify _____
<p>Question 2.8: Pediatric Theory and Approaches</p> <p>Which do you use currently?</p> <p><i>(Check all that apply)</i></p>	<input type="checkbox"/> MOHO (Model of Human Occupation/ Keilhofner -USA) <input type="checkbox"/> CMOP-E (Canadian Model of Occupational Performance and Engagement/ Law et al. - Canada) <input type="checkbox"/> PEOP Model (Person Environment-Occupation-Performance/ Baum -USA) <input type="checkbox"/> OPM (The Occupational Performance Model/ Chapparo & Ranka -Australia) <input type="checkbox"/> Ecological Model (Dunn - USA) <input type="checkbox"/> CCT (Client Centred Practice/ UK) <input type="checkbox"/> CO-OP (Cognitive Orientation to daily Occupational Performance/ Canada) <input type="checkbox"/> Developmental Model (USA/ Europe) <input type="checkbox"/> NDT (Neuro-Developmental Treatment/ Bobath -Europe) <input type="checkbox"/> Motor Control (?) <input type="checkbox"/> SI (Sensory Integration/ Ayers -USA) <input type="checkbox"/> Sensory Processing & Sensory Diets (Australia/ USA/ Europe) <input type="checkbox"/> CIMT (Constraint Induced Movement Treatment/ Taub -USA)

3) Preferences

<p>Question 3.1: Professional Development</p> <p>What is your preferred method of receiving professional information about occupational therapy?</p> <p><i>(Please rank 1= most favorable to 7= least preferred method):</i></p>	<p><input type="checkbox"/> Printed information</p> <p><input type="checkbox"/> Online training</p> <p><input type="checkbox"/> Recorded chat or lecture</p> <p><input type="checkbox"/> Recorded video with demonstration</p> <p><input type="checkbox"/> University Lecture</p> <p><input type="checkbox"/> Live demonstration</p> <p><input type="checkbox"/> Live discussion with expert</p>
<p>Question 3.2: Professional Development</p> <p>What is your preferred method of receiving professional development training about occupational therapy?</p> <p><i>(Please rank 1= most favorable to 7= least preferred method):</i></p>	<p><input type="checkbox"/> Conferences, workshops or meetings</p> <p><input type="checkbox"/> In person academic courses or lectures</p> <p><input type="checkbox"/> Social media events or discussions (e.g. QQ or WeChat)</p> <p><input type="checkbox"/> Self-paced electronic or video course</p> <p><input type="checkbox"/> Instructional video or web-based video training</p> <p><input type="checkbox"/> Healthcare journals</p> <p><input type="checkbox"/> Books or workbooks</p>

4) Perceptions

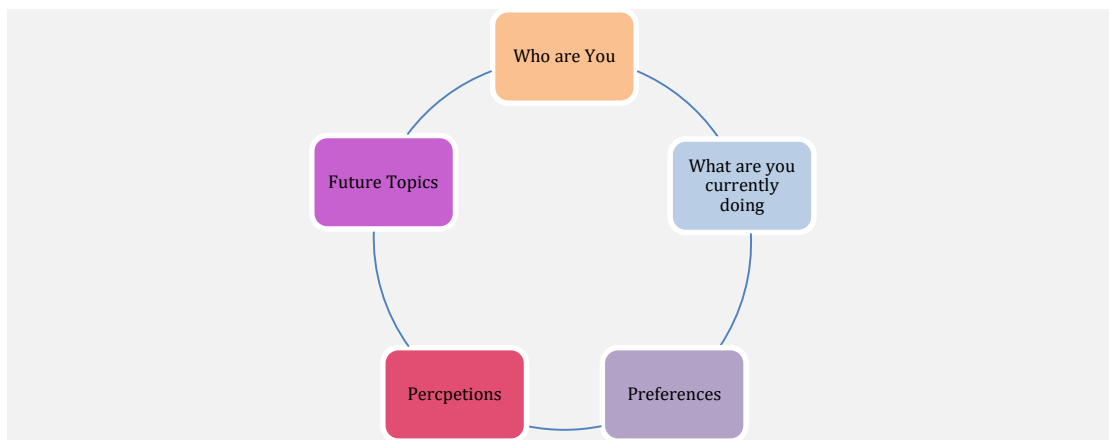
<p>Factor Perceptions - Questions 4.1 – 4.5</p> <p><i>(Please indicate on the five point scale)</i></p>	<p>1 = Strongly Agree</p> <p>2 = Agree</p> <p>3 = Neutral</p> <p>4 = Disagree</p> <p>5 = Strongly Disagree</p>
<p>Question 4.1</p> <p>➤ I am satisfied with the Language translation resources for international occupational therapy practice information.</p>	<p>1 2 3 4 5</p>
<p>Question 4.2</p> <p>➤ I am satisfied with the Cultural understanding resources for international occupational therapy practice information.</p>	<p>1 2 3 4 5</p>
<p>Question 4.3</p> <p>➤ I am satisfied with the Technology that allows for virtual access to international occupational therapy practice information.</p>	<p>1 2 3 4 5</p>
<p>Question 4.4</p> <p>➤ I am satisfied with the Sociopolitical policies and procedures for access to international occupational therapy practice information.</p>	<p>1 2 3 4 5</p>
<p>Question 4.5</p> <p>➤ My learning needs are being met to provide competent occupational therapy services to children in China.</p>	<p>1 2 3 4 5</p>

<p>Question 4.6: Education Plans</p> <p>Do you plan to get an advanced degree in the next 3 - 5 years?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> If Yes, please indicate which area :</p> <ul style="list-style-type: none"> <input type="radio"/> Pediatric Certification <input type="radio"/> Occupational Therapy Masters <input type="radio"/> Other, please specify
<p>Question 4.7: Competency Needs</p> <p>Do you have what you need to provide competent occupational therapy services to children in China?</p>	<p><input type="checkbox"/> If Yes, What has been the most helpful?</p> <p>_____</p> <p><input type="checkbox"/> If No, What would be helpful?</p> <p>_____</p>
<p>Question 4.8: Values</p> <p>What is most important to you as a health care worker in China?</p>	

5) Future Topics

<p>Question 5.1</p> <p>Future Topic Professional Issues</p> <p><i>(Check all that you are interested in)</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Applying Occupational Therapy Theory or Models <input type="checkbox"/> Occupational Science Updates <input type="checkbox"/> Participating and Applying Evidence Based Practice <input type="checkbox"/> Clinical Reasoning in Occupational Therapy <input type="checkbox"/> How to Use a Client Centered Approach <input type="checkbox"/> Reflective Practice Techniques <input type="checkbox"/> How is the role of Occupational Therapy Distinctly Different
<p>Question 5.2</p> <p>Future Topic Intervention</p> <p><i>(Check all that you are interested in)</i></p>	<p>Occupational Therapy Intervention Skills related to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Movement <input type="checkbox"/> Sensory processing <input type="checkbox"/> Emotional self-regulation <input type="checkbox"/> Cognition <input type="checkbox"/> Communication <input type="checkbox"/> Self-care <input type="checkbox"/> Social/inter-personal skills
<p>Question 5.3</p> <p>Future Topic Context</p> <p><i>(Check all that you are interested in)</i></p>	<p>Applying Occupational Therapy in Context</p> <ul style="list-style-type: none"> <input type="checkbox"/> Hospital <input type="checkbox"/> Clinic <input type="checkbox"/> Home <input type="checkbox"/> School <input type="checkbox"/> Childcare <input type="checkbox"/> Orphanage <input type="checkbox"/> Other locations

APPENDIX B: INFORMED CONSENT FORM



This Needs Assessment survey aims to gather information of occupational therapists and their reported needs while providing services in pediatrics in mainland China. It is a combined effort of many interested groups from both China and the USA to support occupational therapy and your professional development while in mainland China. Completing the survey is voluntary, and by completing the survey, you give permission to use your responses in this research project. Participant's identity will be confidential through an anonymous virtual survey platform. There are no anticipated risks for participation, and the benefits are that you and others interested in occupational professional development will have more information to improve training and topics that meet your needs. The Needs Assessment Focus Group, the Chinese Occupational Therapy Group leaders, and participating Professional Development Provider Groups have access to a summary of the data. A summary report session will be scheduled on WeChat at the conclusion for you to take part in as well. It should take less than 20 minutes to complete this survey, and you will be helping to get resources that you want and prefer offered to you and other occupational therapists living and working in China.

If you have any questions contact, please contact Susan Skees Hermes at OTinChina.com

Print a copy of this form to keep for your records.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

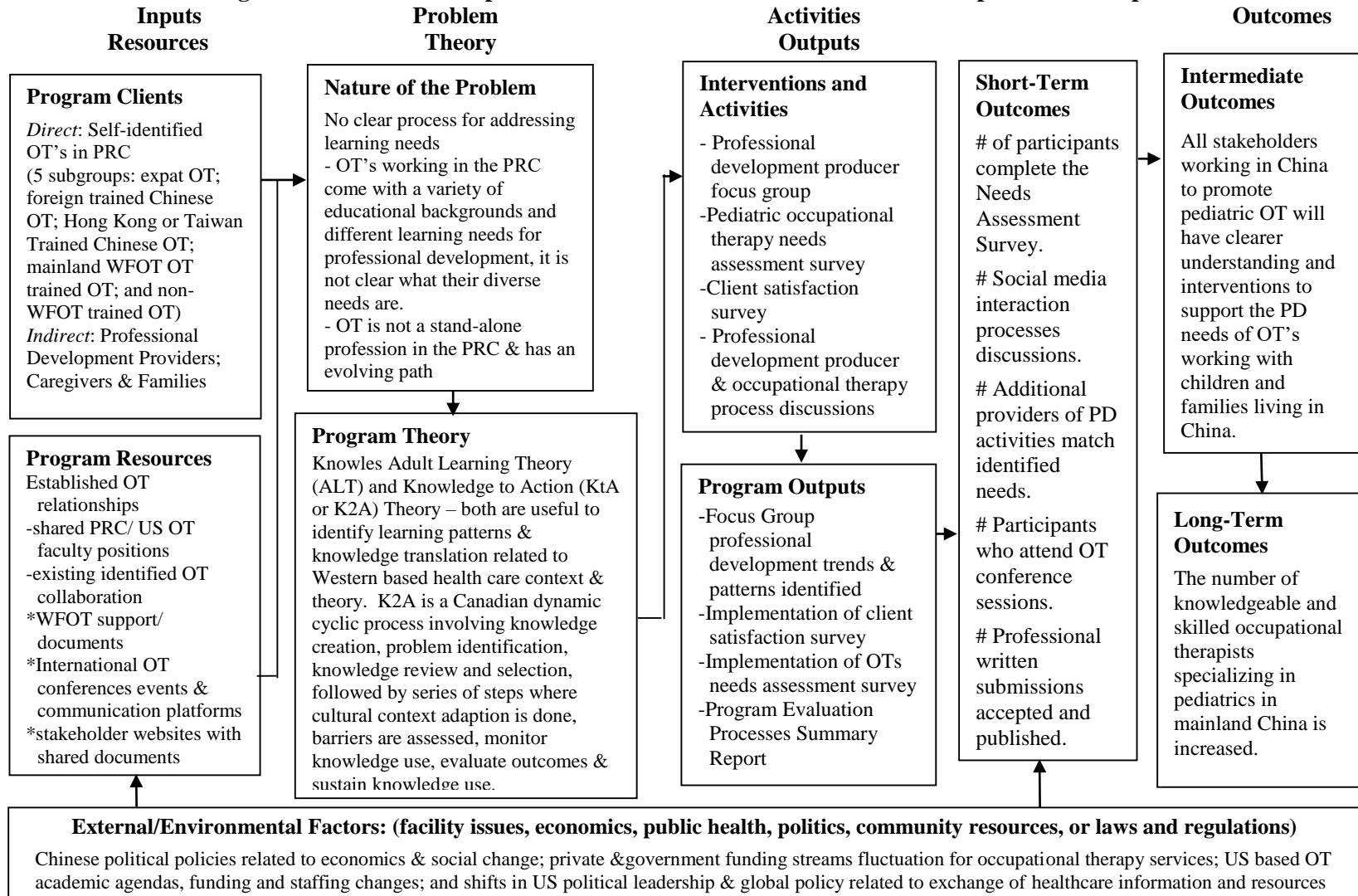
Your Signature _____ Date

Your Name (printed)

This consent form will be kept by the researcher for at least three years beyond the end of the study.

APPENDIX C: LOGIC MODEL

Program Title: The Development of a Needs Assessment of Pediatric Occupational Therapists



APPENDIX D: FACTSHEET



THE DEVELOPMENT OF A NEEDS ASSESSMENT OF PEDIATRIC OCCUPATIONAL THERAPISTS: LEARNING NEEDS FOR COMPETENCY IN MAINLAND CHINA

Susan Skees Hermes, MS, OTR/L, BCP
OTD Candidate

Definition of the Project

- *What is it?* A needs assessment survey and program evaluation proposal
- *What are the main issues that it addresses?* Understanding pediatric OTs needs
- *Where or to whom does it apply?* Mainland China or other developing countries
- *How is it funded?* OT partnerships with Chinese OT programs & healthcare
- *How is it accessed?* WeChat, publications and conferences

Clinical problem:

The learning needs of occupational therapists working in mainland China are unknown.

What Do We Know?

- Hypothesized factors influencing learning needs in China are: language, cultural collectivism, technology & sociopolitical policies.
- Knowle's Adult Learning Theory is applicable in China with some caution for teacher's preferences.
- World Federation of Occupational Therapy (WFOT) entry-level competencies framework provides a professional development path.
- Knowledge to Action Theory applies to OT research.

What Does the Research Show?

- Entry-level competencies and culturally relevant core threshold concepts for occupational therapists contribute to knowledge and skill development.
- Continued competency requires a commitment to lifelong learning, and supports the transition from novice to expert clinician status.
- Research details a typical pediatric occupational therapy practice profile.
- Knowledge translation models applied in research to occupational therapy knowledge and practice are limited.
- Survey trends in participant demographics and descriptors from occupational therapy research can be helpful to identify Chinese occupational therapist work context and professional profile.

Solution to the problem



Program Evaluation Stages

Stage 1 – Planning with the Professional Development Providers (*the Producers*)

Focus Group, the occupational therapists (*the Doers*), and the families (*the Receivers*) whose children receive occupational therapy in mainland China. Stage 2 – Verification through the implementation of *Doers* and *Receivers* surveys.

Stage 3 – Validation with data analysis/process group discussions with *the Producers* and *the Doers* to confirm the results

Stage 4 – Recommendations from the assessment are then disseminated based on most effective to impact positive change behaviors in each groups.

Recommendations for Occupational Therapy Practitioners

What is the significance/relevance for provision of OT services? Provides a plan to understand OT's learning needs, practice profile in context, and preferences in professional development to increase awareness of competency and strategies that support transition from novice to expert.

How does it support/facilitate/insure the provision of OT services? To increase the number of knowledgeable and skilled occupational therapists specializing in pediatrics in mainland China/To develop a stakeholder needs-based educational programming change in pediatrics to occupational therapists in mainland China.

References

- Brown, T., Tseng, M. H., Casey, J., McDonald, R., and Lyons, C. (2010a). Research knowledge, attitudes, and practices of pediatric occupational therapists in Australia, the United Kingdom, and Taiwan. *Journal of Allied Health*, 39(2), 88-94.
- King, G. (2009). A framework of personal and environmental learning based strategies to foster therapist expertise. *Learning in Health and Social Care*, 8(3), 185-199.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2nd ed.). Cambridge Books: New York, NY.
- Newcomer, K. E., Hatry, H.P. & Wholey, J.S. (Eds.) *Handbook of practical program evaluation*. San Francisco, CA: Jossey-Bass.
- Shi, Y., & Howe, T. H. (2016). A survey of occupational therapy practice in Beijing, China. *Occupational Therapy International*. 23, 186 – 195.
- World Federation of Occupational Therapists. (2008b). Entry-level competencies for occupational therapists. Retrieved from <http://www.wfot.org/ResourceCentre.aspx>

APPENDIX E: STAKEHOLDERS IN CHINA

The Doers Category	Description
Mainland WFOT OT trained OTs	Chinese occupational therapy clinicians with occupational therapy training within WFOT approved mainland programs.
Non-WFOT trained OTs	Chinese occupational therapy clinicians with occupational therapy training that are not currently WFOT approved mainland programs
Hong Kong or Taiwan Trained Chinese OTs	Chinese occupational therapy clinicians with occupational therapy training in Taiwan or Hong Kong WFOT approved program
Chinese Foreign Trained OTs	Chinese occupational therapy clinicians with occupational therapy training at WFOT approved program outside of the PRC
Foreign OTs	Foreigners (or expats) occupational therapy clinicians with occupational therapy training at WFOT approved program outside of mainland China
The Producers Category	Description
Chinese employers	Employers of pediatric occupational therapists in China who may either approve external professional development or provide internal training to their staff.
Chinese OT programs	OT academic programs in China providing professional development content to occupational therapists.
WFOT/foreign OT programs	WFOT and Foreign OT educational programs addressing the promotion of occupational therapy and professional development in China.
CARM Occupational Therapists Group	A subgroup working on governing policies and practice standards for a legally recognized and internationally approved Chinese Occupational Therapy Association and best practice in the PRC. This group participates work group activities for to produce documents for occupational therapy in China, in policy and regulatory policies as indicated, and identification of guest speakers and topics for professional meetings, conferences, and training.
Bicultural OT Educators	Chinese bilingual educators with lived experience in western countries who provide professional development post entry level trainings. These individuals often have multiple roles outside of their teaching.
PD businesses & NGO	Businesses or non-government organizations involved or interested in providing occupational therapy professional development.
The Receivers Category	Description
The families and caregivers	The caregivers and families whose children receive occupational therapy services

APPENDIX F: FOCUS GROUP STAKEHOLDER ANALYSIS FORM

Stakeholders	Who are they?	Role?	What they need?	How to get buy-in?
Children, caregivers & families in China				
Chinese OT employers				
Chinese OT programs				
WFOT/foreign OT programs				
CARM Occupational Therapists Group				
Bicultural OT Educators				
PD businesses & NGO				
OT's working in PRC				
WFOT				
CARM				
CFDP				
Other:				

CHART KEY

Who are they? Identify the individuals or businesses by name in key decision making roles in these organizations or groups?

Role: What role do they play as stakeholders in the provision and development of occupational therapy that may impact the program evaluation processes?

P=player - both interest + significant ability to make change occur

S=subject – interest but little ability to make change occur

CS=context setters – ability to make change occur but little direct interest

C=the crowd – little interest or ability to make change occur but can mobilize against project easily

What they need? What is it this individual or organization needs that the Needs Assessment Survey can provide them?

How to get buy-in? Based upon current information on this group what method is suggested to encourage their engagement, utilization and implementation of the knowledge gained from the Needs Assessment Survey and the processes?

APPENDIX G: STAKEHOLDER EVALUATION QUESTIONS

For the Players:

PQ 1) Tell us how you got involved with occupational therapy in mainland China?

PQ 2) What are the most important accomplishments of your organization's efforts in supporting the profession of occupational therapy in the PRC?

PQ 3) What should be continued and what should be changed to support the professional development needs of all the occupational therapists working in pediatrics in China in order to provide globally based best practice services?

PQ 4) What should be continued and what should be added to support the professional development needs of all the occupational therapists working in pediatrics in China in order to be a sustainable and distinct profession in the PRC?

For the Context Setters

CS 1) What needs to stay the same with efforts to develop occupational therapy in the PRC?

CS 2) What needs to change, and how would you suggest it be improved?

For the Participants

SQ 1) Current printed educational resources available in the PRC meet my occupational therapy professional development needs to provide evidence based services to pediatric clients.

- 1 – Very dissatisfied
- 2 – Dissatisfied
- 3 – Unsure
- 4 – Satisfied
- 5 – Very satisfied

SQ 2) I currently use the following resources to address my occupational therapy professional development needs: (check all that apply).

- 1 – Social media (e.g. QQ Saturday 1 hour chat sessions)
- 2 – CARM/ OT group annual meeting
- 3 – Continuing education OT courses offered online
- 4 – Continuing education OT courses offered at local university
- 5 – Continuing education OT courses offered by healthcare education company
- 6 – Read English text professional journals
- 7 – Read Chinese language text professional journals

SQ 3) How does language translation methods impact my ability to provide culturally relevant occupational therapy to pediatric clients in the PRC?

- 1 – Strongly impedes
- 2 – Somewhat impedes
- 3 – Neutral
- 4 – Somewhat supports
- 5 – Strongly supports

SQ 4) How does technology impact my ability to provide culturally relevant occupational therapy to pediatric clients in the PRC?

- 1 – Strongly impedes
- 2 – Somewhat impedes
- 3 – Neutral
- 4 – Somewhat supports
- 5 – Strongly supports

SQ 5) How do traditional Chinese philosophies of cultural collectivism impact my ability to provide culturally relevant occupational therapy to pediatric clients in the PRC?

- 1 – Strongly impedes
- 2 – Somewhat impedes
- 3 – Neutral
- 4 – Somewhat supports
- 5 – Strongly supports

APPENDIX H: WFOT COMPETENCIES AND SURVEY CHART

Section Title	WFOT competency	Survey Questions
Section 1: <i>Who are you?</i>	The person-occupation-environment relationships and the relationship of occupation to health and well-being:	<ul style="list-style-type: none"> • Which types of clients do you typically work with? • Descriptive Information
	Therapeutic and professional relationships	<ul style="list-style-type: none"> • Where have you received occupational therapy training other than at your university to provide occupational therapy to children in China?
Section 2: <i>What are you currently doing?</i>	An occupational therapy process encompassing collaborative, people-centered, occupational focused processes	<ul style="list-style-type: none"> • Which of these assessments do you use currently? • Please indicate if you are satisfied with these supporting your access to international occupational therapy practice information?
	The context of professional practice	<ul style="list-style-type: none"> • Where do you currently work? • Do you have what you need to provide occupational therapy services to children in China?
Section 3-5: <i>Preferences, Perceptions and Future Topics</i>	Professional reasoning and behavior	<ul style="list-style-type: none"> • Where do you currently get your occupational therapy information? • Which do you use currently? • What is your preferred method of receiving professional information about occupational therapy? • What is your preferred method of receiving additional professional development training about occupational therapy? • Content or topics you would like to be provided in additional education offering

**APPENDIX I: MODIFIED DESIGN MATRIX FOR OTS IN PEDIATRICS IN
CHINA**

Researchable Question	Q1) Language(s)	Q2) Technology	Q3) Cultural collectivism	Q4) Sociopolitical policies
Criteria & information required/ source	Dialects and foreign languages that are not mastered by OT's, and/ or access to alternative translation methods	Access to computers, software, virtual connections, & unfiltered electronic communications	Taoism & Confucius's teachings	Communist government policies and allocation of resources across the country
Scope & methodology, including data reliability	Pilot with paper survey and semi-structured interview; then follow with paper launch at meeting	Pilot with paper survey and semi-structured interview; then follow with paper launch at meeting	Pilot with paper survey and semi-structured interview; then follow with paper launch at meeting	Pilot with paper survey and semi-structured interview; then follow with paper launch at meeting
Limitations	May be impacted by live translator or printed translation can be confusing; also may prefer to try to answer in English as historical priority in educational for mastery	May be impacted by funding or geographic location; and not as much by availability	May not be a conscious influence of participants by context	May be considered sensitive subject and respondents uncomfortable answering in any format
What this analysis will likely allow	If language translation is a clinical barrier, and may want to further investigate a distinction between preferred methods to communicate with clients; and language preference for OT professional development materials	OTs in China perception of technology as a support or barrier to connecting to OT professional development and EBP materials	May assist in guiding the degree and need for modification of more predominantly western influenced OT education and professional development content	Might show the level of comfort with reporting information about government impact that had historically been censored

(Newcomer, Hatry, & Wholey, 2015)

APPENDIX J: PATIENT SATISFACTION SURVEY

Dear [FIRST NAME]

Thank you for giving us the opportunity to serve you better. Please help us by taking a few minutes to tell us about the service that you have received so far. We appreciate your business and want to make sure we meet your expectations.

Sincerely, [MANAGER_NAME] Manager

Overall, I am very satisfied with the way my occupational therapists provided services.

- Strongly Disagree
 Somewhat Disagree
 Neither Agree nor Disagree
 Somewhat Agree
 Strongly Agree

Questions	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
My occupational therapists are well trained	1	2	3	4	5
My occupational therapists are well supervised	1	2	3	4	5
My occupational therapists adhere to professional standards of conduct	1	2	3	4	5
My occupational therapists act in my child and the best interest of my family.	1	2	3	4	5
I will recommend this clinic to others	1	2	3	4	5

APPENDIX K: DISSEMINATION ACTIVITIES MATRIX

TARGET AUDIENCE	INTERVAL	OUTCOME	CHANGE STAGE	DISSEMINATION METHOD
<i>Pediatric Occupational Therapists in China</i>	Implementation Final dissemination	Survey engagement Application of results for improved PD planning	Awareness & interest with high responsibility to initiate, then search, decision & action with high ownership of acting on the results for a match in professional development activities	<ul style="list-style-type: none"> ➤ Person to person (invitation to participate, briefing, meeting) ➤ Electronic media (email blast, website, podcast, testimonial video, group posting regarding results, list serve for invitation to participate and results, social media – QQ or WeChat invitation, survey & updates on resources post-program evaluation) ➤ Written materials (factsheet, brief, brochure, journal article, newsletter, chapter in book)
<i>Chinese employers</i>	Final dissemination	Incorporation of results to improve PD offering for OTS	Awareness and then for rapid action	<ul style="list-style-type: none"> ➤ Person to person (Chinese healthcare & rehabilitation conferences & meeting) ➤ Written materials (factsheet, brief/ executive summary, journal article)
<i>Chinese OT programs</i>	Formative Final dissemination	Focus group participation Collaboration in articles and presentations Incorporate results in OT PD programming as indicated	Awareness & interest to provide feedback in Focus Group/ then search, decision & action to support professional development opportunities that align with data results to meet OT	<ul style="list-style-type: none"> ➤ Person to person (invitation to participate in Focus Group for Formative/ and then Chinese Rehabilitation and Education conference, PD workshops, OT educator/academic courses, & meetings) ➤ Electronic media (email blast for

			self-identified needs	<p>invitation to Focus Group/ then encouraged to access podcast, group posting on Chinese social media – QQ or WeChat)</p> <ul style="list-style-type: none"> ➤ Written materials (factsheet, brief/ executive summary to program chairs, journal article & newsletters in Chinese healthcare publications)
<i>WFOT/ foreign OT programs</i>	Final dissemination	Incorporate results in OT PD & collaborations in programming as indicated	Awareness, interest, search with keen decision to act and align with survey data results with their initiatives in China	<ul style="list-style-type: none"> ➤ Person to person (AOTA conference international track; WFOT Congress presentations or poster sessions) ➤ Electronic media (Practice & Education group postings on WFOT/ OTION) ➤ Written materials (factsheet, brief/ executive summary, journal article, chapter in next OT's without Borders book)
<i>CARM OT subgroup</i>	Formative Implementation Final dissemination	<p>Focus group participation</p> <p>Collaboration in articles and presentations</p> <p>Incorporate results in OT PD in policy, planning & programming as indicated</p>	Interest with growing ownership of collaboration, and then decision to act with all stages of dissemination	<ul style="list-style-type: none"> ➤ Person to person (invitation to participate in Focus group, briefing, then at Chinese conferences, workshop, academic course, meeting, etc.) ➤ Electronic media (email invitation to participate, then dissemination through WeChat or QQ podcast, OT continuing education on social media – QQ or WeChat)

				<ul style="list-style-type: none"> ➤ Written materials (factsheet, brief, brochure, journal article, newsletter, chapter in book)
<i>Bicultural OT educators/presenters</i>	Implementation Final dissemination	Invite Chinese OTS contacts to participate Incorporation of results to improve PD offering for OTS	Interest with decision to share the survey link, then decision to act on survey data results with content they present in professional development courses and activities	<ul style="list-style-type: none"> ➤ Person to person (briefing and request to pass on survey to former students and fieldwork clinicians, then conference, workshop, academic course, meeting, etc.) ➤ Electronic media (email blast invitation to pass on WeChat survey link, then blogs, & social media – QQ or WeChat) ➤ Written materials (factsheet, journal article)
<i>PD businesses</i>	Final dissemination	Incorporate results in OT PD programming as indicated	Awareness with low level of ownership but desire to take action on final survey recommendations in courses and content offering	<ul style="list-style-type: none"> ➤ Electronic media (key stakeholder's websites with summary posts & blogs) ➤ Written materials (factsheet, brief/ executive summary, and, journal article)
<i>Children and Families receiving occupational therapy services</i>	Final dissemination	Improve awareness and satisfaction with competency of occupational therapists in China	No notable awareness of project but invested in indirect improvement in quality of care	<ul style="list-style-type: none"> ➤ Person to person (parent education presentations individually or in groups) ➤ Electronic media (key stakeholder's websites with summary posts & blogs, Family directed WeChat summary messages) ➤ Written materials (factsheet)

EXECUTIVE SUMMARY

The growth and learning needs of pediatric occupational therapists working in the People's Republic of China (PRC) and the greater geopolitical area of China have not been fully researched or documented. Without a formal occupational therapy association, the communication and planning to identify these professional development needs can be challenging. In the past decade, several occupational therapy academic institutions from the United States have launched initiatives to support occupational therapy with Chinese partners (AOTA, 2014; Sinclair, 2015; Sinclair & Cao, 2016). Other international partnerships are emerging to support the development of both occupational therapy curriculum and professional development in mainland China. However, a formal needs assessment of the occupational therapists has not yet been undertaken.

Project Overview

A review of English-based literature revealed that government policies and economic opportunities in the PRC have shifted in the past two decades providing an opening for more Western-based healthcare (LeDeu, et al., 2012; Zhou, 2006). Through the efforts of several local Chinese clinicians and businesses, occupational therapy was introduced by initiatives into mainland China. Currently, the Chinese Association of Rehabilitation Medicine (CARM) remains the overseer of the occupational therapy organizational efforts. This group reached recognition as a distinct subcommittee and helped launch the Occupational Therapy National Education Guidelines published respectively in 2011 and 2013 (Sinclair & Cao, 2016). However, the group does not have a legally recognized status as an occupational therapy association or approval as an

organizational member of the World Federation of Occupational Therapy (WFOT) (Sinclair & Cao; 2016).

WFOT resources available for non-member countries combined with some of the traditional occupational therapy resources and initiatives from Hong Kong and Taiwan are assisting the mainland CARM Chinese Occupational Therapists group (Sinclair, 2015, Lin, 2014). Language nuances, historical issues, and political issues can make direct transference to the mainland of China problematic. These activities help support occupational therapy as a distinct healthcare profession within these regions of the PRC but may have barriers to direct application to mainland China.

Currently, the PRC government only recognizes licenses for rehabilitation therapists (Lin, 2014; Lim & Duque, 2011). International standards support autonomy and discipline-specific professional identities that include occupational therapy, physical therapy, and speech therapy (WFOT, 2008; WFOT, 2012; WFOT, 2014; WCPT, 2016). Many challenges are present. The identity of occupational therapy is still emerging as a healthcare profession in the PRC. The diversity in education, clinicians' backgrounds, language skills, and country of origin of the occupational therapists themselves is an issue. Hypothesized factors influencing occupational therapists are variations in the languages understood and spoken, the influence of cultural collectivism, inconsistencies in internet access, and variability in access to professional resources depending on sociopolitical policies in the geographic region. These challenges complicate continuing education planning and resources for the pediatric occupational therapists.

Three levels of stakeholders are identified for this research project. These are as

follows: the professional development providers, the occupational therapists, and the families whose children receive occupational therapy in mainland China. Working in collaborative partnerships, the research team will identify the developmental training needs of the occupational therapists and provide the educational recommendations that will foster improved competency in practice.

Research and analysis on the adult learning needs increases the likelihood that occupational therapists will engage in the professional learning opportunities and enhances the possibility that the new learning concepts will be transferred and have an impact on their performance. Based on adult learning theory, which has application to both Western clinicians working in China and Chinese clinicians, having the self-identified needs of adult learners improves the intrinsic motivation of the learners and helps the educators provide more learner-centered strategies (Wang, 2008; Wang & Farmer, 2008; Wang & Kreysa, 2006; Kennedy, 2002). Global best practice research helps promote competent pediatric practices and suggests strategies that support transitioning novice clinicians to expert status and identification of prudent investments for professional development resources. The communication and exchange of information between the therapists and key stakeholder audiences with a research-based inquiry, needs analysis, and implementation plan will greatly enhance China's Occupational Therapy dimensions.

A facilitated needs assessment can assist in determining and understanding learning needs, preferences, patterns and future topics for occupational therapists, and the groups that provide their professional development training (Newcomer, Hatry &

Wholey, 2015). Both the occupational therapists and the providers of professional development activities gain a better understanding of occupational therapy learning needs in the context of international evidence-based competency content. Once the program processes are completed, the implementation and dissemination of the program summary results will occur. The program summary recommendations are hypothesized to have an impact on improving the perception of the quality of pediatric occupational therapy services received by caregivers and families in mainland China.

Key Findings

Five themes emerged from the evidence-based literature search and review of pediatric occupational therapy competency and knowledge translation in developing countries that can inform a needs assessment.

- Entry-level competencies and culturally relevant core threshold concepts for occupational therapists contribute to knowledge and skill development (Fortune & Kennedy-Jones, 2014; Nicola-Richmond, Pepin, & Larkin 2016; Meyer & Land, 2003; Veras et al., 2013).
- Continued competency requires a commitment to lifelong learning and support processes for transitioning from novice to expert clinician status (King, 2009; King et al, 2008a; King et al, 2008b; Nicola-Richmond, et al., 2016; Unsworth & Baker, 2016; Wilding, Curtin, & Whiteford, 2012; WFOT, 2008; WFOT, 2016).
- Research details a typical pediatric occupational therapy practice profile (Brown et al., 2005; Brown et al., 2010a; Brown et al., 2010b).

- Knowledge translation models applied in research to occupational therapy knowledge and practice are limited (Colquhoun et al., 2010; Metzler & Metz, 2010).
- Survey trends in participant demographics and descriptors from occupational therapy research can be helpful to identify Chinese occupational therapist work context and professional profile (Scheidegger & Torrance-Foggin, 2015; Shi & Howe, 2016; Tse et al., 2005).

Several components from the evaluation summary will impact the development and design of a needs assessment survey. The evidence suggests that supporting the process of novice to expert, addressing self-identified motivation, clarifying the complexity of client caseload, and meeting the need for explicit explanations of domain specific protocols to support expert reasoning skills, should all be part of the inquiry content of the survey detailing what already exists and what needs to be developed. Further investigation needs to address the eastern relevance of the ten core threshold concepts of occupational therapy identified in the Nicola-Richmond et al. (2016) study. Vigilance is necessary when applying a cultural lens towards the approaches to occupational therapy and the factors influencing the experiences of the children and families. Cultural awareness also applies to clinicians and the healthcare context in any program design (Roger, Clark, Banks, O'Brien, & Martinez, 2009; WFOT, 2008; WFOT, 2016). The final concept to explore is the applicability of the use of social media, a community of practice, and mentoring to support the learning needs of occupational therapists working in China (Unsworth & Baker, 2016; Wilding, et al., 2012; Yan, Sinclair, & Penman, 2012).

Recommendations

The proposed needs assessment of pediatric occupational therapists working in mainland China will be most effective with multiple stakeholder collaboration. The expenses are reduced if a virtual platform is successful in all phases of the project and should run less than \$14,500 (\$11,500 the first year, and \$3,000 the second year. Staffing expenses (\$5,140) include experts in program evaluation, statistics, and bilingual editing as consultants. The compensation for the USA-based and Chinese-based occupational therapy investigators vary depending on whether virtual, in-person focus group, or survey formats are selected. The planned virtual dissemination opportunities have limited costs associated with them and could be expanded to include person-to-person contact through live conference presentations. This is an elective expense (<\$7,200 in the second year), which could represent a substantial portion of expenses in the second year; however, this may represent the only path for networking opportunities. Funding sources will vary depending on the lead researcher's affiliations. It would be prudent to identify a bilingual co-investigator living in China to broaden the funding availability.

General Conclusions

The impact of understanding the learning needs of the target audience of pediatric occupational therapists working in mainland China is significant. By participating in the survey process and having interactive access to the development stakeholders and the results, therapists can gain a better understanding of future learning paths.

Executive Summary References

- American Occupational Therapy Association (AOTA) Occupational therapy practice framework: Domain & process (3rd Ed.). (2014). Retrieved from October 13, 2015 from <http://www.aota.org//media/corporate/files/secure/practice/officialdocs/guidelines/framework%203edbookr4final.pdf> .
- Brown, T., Rodger, S., Brown, A., & Roevers, C. (2005). A comparison of Canadian and Australian pediatric occupational therapists. *Occupational Therapy International*, 12 (3) 137 - 161.
- Brown, T., Tseng, M. H., Casey, J., McDonald, R., & Lyons, C. (2010a). Research knowledge, attitudes, and practices of pediatric occupational therapists in Australia, the United Kingdom, and Taiwan. *Journal of Allied Health*, 39(2), 88-94.
- Brown, T., Tseng, M. H., Casey, J., McDonald, R., & Lyons, C. (2010b). Predictors of research utilization among pediatric occupational therapists. *OTJR: Occupation, Participation and Health*, 30 (4), 173 – 183.
- Colquhoun, H. L., Letts, L. J., Law, M. C., MacDermid, J. C., & Missiuna, C. A. (2010). A scoping review of the use of theory in studies of knowledge translation. *Canadian Journal of Occupational Therapy*, 77, 270-279.
- Fortune, T., & Kennedy-Jones, M. (2014). Occupation and its relationship with health and wellbeing: The threshold concept for occupational therapy. *Australian Occupational Therapy Journal*, 61, 293 – 298.
- Kennedy, P. (2002). Learning cultures and learning styles: Myth-understandings about adult (Hong Kong) Chinese learners. *International Journal of Lifelong Education*, 21(5), 430-445.
- King, G. (2009). A framework of personal and environmental learning-based strategies to foster therapist expertise. *Learning in Health and Social Care*, 8(3), 185-199.
- King, G., Bartlett, D. J., Currie, M., Gilpin, M., Baxter, D., Willoughby, C., Tucker, M. A., & Strachan, D. (2008a). Measuring the expertise of paediatric rehabilitation therapists. *International Journal of Disability, Development and Education*, 55(1), 5-26.
- King, G., Currie, M., Barlett, D. J., Strachan, D., Tucker, M. A. & Willoughby, C. (2008b). The development of expertise in paediatric rehabilitation therapists: The roles of motivation, openness to experience, and types of caseload experiences. *Australian Occupational Therapy Journal*, 55, 108 – 122. Doi:10.1111/j.140-1630.2007.00681.x .
- LeDeu, F., Parekh, R., Zhang, F., & Zhou, G. (November, 2012). Healthcare in China: Entering “uncharted waters”. In Insights and Publications. Retrieved from http://www.mckinsey.com/insights/health_systems_and_services/health_care_in_china_entering_uncharted_waters .
- Lim, K.H. & Duque, R. L. (2011). The challenge for occupational therapy in Asia: becoming an inclusive, relevant, and progressive profession. In F. Kronenberg, N. Pollard, & D. Sakellariou (Eds.), *Occupational therapies without borders*:

- Towards an ecology of occupation based practices, Vol 2.* (pp 103- 112). New York, NY: Churchill Livingstone Elsevier.
- Lin, G. (2014). Development of Occupational Therapy in Mainland China. [Lecture presentation] Lecture presentation at the World Federation of Occupational Therapist Congress, Yokohama, Japan.
- Metzler, M. J., & Metz, G. A. (2010). Translating knowledge to practice: An occupational therapy perspective. *Australian Occupational Therapy Journal*, 57, 373 - 379.
- Meyer, J., & Land, R. (2006). Issues of luminality. In J. H. F. Meyer & R. Land (Eds.). *Overcoming barriers: Threshold concepts and troublesome knowledge* (pp. 19 – 32). New York, NY: Taylor & Francis Group.
- Newcomer, K.E., Hatry, H.P. & Wholey, J.S. (2015). *Handbook of practical program evaluation* (Eds.). San Francisco, CA: Jossey-Bass.
- Nicola-Richmond, K. M., Pepin, G., & Larkin, H. (2016). Transformation from student to occupational therapist: Using the Delphi technique to identify the threshold concepts of occupational therapy. *Australian Occupational Therapy Journal*, 63, 95-104.
- Roger, S., Clark, M., Banks, R., O'Brien, M., & Martinez, K. (2009). A comparison of international occupational therapy competencies: Implications for Australian standards in a new millennium. *Australian Occupational Therapy Journal*, 56 (6), 372 - 383.
- Scheidegger, G., & Torrance-Foggin, M. E. (2015). Occupational therapy and cultural understanding: Cross-cultural experiences in a newly established occupational therapy service in Qinghai Province, China. *World Federation of Occupational Therapists Bulletin*, 71 (2), 88 – 95.
- Shi, Y., & Howe, T. H. (2016). A survey of occupational therapy practice in Beijing, China. *Occupational Therapy International*. 23, 186 – 195.
- Sinclair, K. (2015, April). Supporting occupational therapy education in China. [Poster] American Occupational Therapy Association (AOTA) annual conference, Nashville, TN.
- Sinclair, K., & Cao, M. (2016). The evolution of occupational therapy as a profession in the People's Republic of China. In D. Sakellariou & N. Pollard (Eds.). *Occupational therapies without borders: Integrating justice with practice* (2nd Ed.). London, UK: Churchill Livingstone Elsevier.
- Tse, Y. K., Cheng, W. C., Li-Tsang, W. P., Chan, Y. C., Tsang-Lau, K. P., So, S. P., Chiu, S. M., Tam, C. W., Yu, C., L., Chan, P. S., & Chui, Y. Y. (2005). Survey of occupational therapy practice in Hong Kong in 2004. *Hong Kong Journal of Occupational Therapy*, 15, 16 – 26.
- Unsworth, C., & Baker, A. (2016). A systematic review of professional reasoning literature in occupational therapy. *British Journal of Occupational Therapy*, 79 (1), 5 – 16.
- Veras, M., Pottie, K., Cameron, D., Dahal, G. P., Welch, V., Ramsay, T., & Tugwell, P. (2013). Assessing and comparing global health competencies in rehabilitation

- students. *Rehabilitation Research and Practice*, 2013, 1-9. Downloaded from <http://dx.doi.org/10.1155/2013/208187> ,
- Wang, V. C. X. (2008). Adult education philosophies in post-modern China. *International Forum of Teaching and Studies*, 4 (1), 21 - 38.
- Wang, V. C. X., & Farmer, L. (2008), Adult teaching methods in China and Bloom's taxonomy. *International Journal for the Scholarship of Teaching and Learning*: 2 (2), Article 13, p 1 – 16. . Retrieved from <http://digitalcommons.georgiasouthern.edu/ij-sotl/vol2/iss2/13> .
- Wang, V. C., & Kreysa, P. (2006). Instructional strategies of distance education instructors in China. *The Journal of Educators Online*, 3(1), 1-25.
- Wilding, C., Curtin, M., & Whiteford, G. (2012). Enhancing occupational therapists' confidence and professional development through a community of practice scholars. *Australian Occupational Therapy Journal*, 59, 312 - 318.
- World Confederation of Physical Therapists (WCPT). (October 11, 2016). Position statement: Autonomy. Retrieved from <http://www.wcpt.org/policy/ps-autonomy> .
- World Federation of Occupational Therapists (WFOT). (2008). Entry-level competencies for occupational therapists. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .
- World Federation of Occupational Therapists (WFOT). (2012). Position statement: Competency and maintaining competency. *World Federation of Occupational Therapists Bulletin*, 66(1), 20–21.
- World Federation of Occupational Therapists (WFOT). (2014). Position statement: Specialization and advanced occupational therapy competencies. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .
- World Federation of Occupational Therapists (WFOT). (2016). Minimum standards for the education of occupational therapists: Revised. [in press].
- Yan, Y., Sinclair, K., & Penman, M. (2012). Using social networking for professional development of occupational therapy throughout the People's Republic of China. *WFOT Bulletin*, 66, 47 – 49.
- Zhou, H. D. (2006). Present Situation and Future Development of Occupational Therapy in China. Retrieved from [http://www.hkjot-online.com/article/S1569-1861\(09\)70036-1/pdf](http://www.hkjot-online.com/article/S1569-1861(09)70036-1/pdf) .

BIBLIOGRAPHY

- American Occupational Therapy Association (AOTA). (2017). Asian/ Pacific Heritage Occupational Therapy Association. Retrieved from <http://www.aota.org/Practice/Manage/Multicultural/Cultural-Competency-Tool-Kit/APHOTA.aspx> .
- American Occupational Therapy Association (AOTA). (June 24, 2014a). AOTA News: Longtime supporters of occupational therapy donate \$20 million to USC's OT program. Retrieved from <http://www.aota.org/Publications-News/AOTANews/2014/Largest-Donation-Goes-to-USC.aspx> .
- American Occupational Therapy Association (AOTAb) Occupational therapy practice framework: Domain & process (3rd Ed.). (2014). Retrieved from October 13, 2015 from <http://www.aota.org//media/corporate/files/secure/practice/officialdocs/guidelines/framework%203edbookr4final.pdf> .
- Ballie, C., Bowden, J., & Meyer, J. (2013). Threshold capabilities: Threshold concepts and knowledge capability linked through variation theory. *Higher Education*, 65, 227–246.
- Bannigan, K., & Moores, A. (2009). A model of professional thinking: Integrating reflective practice and evidence based practice. *Canadian Journal of Occupational Therapy*, 76(5), 342–350.
- Barrett, D. (2017, January 14). *International perspectives on health-related rehabilitation*. Speech presented at the 2017 International Rehabilitation Symposium: Looking Forward to 2020 in Shenzhen, China.
- Baum, C., & Law, M. (1998). Community health: A responsibility, an opportunity, and a fit for occupational therapy. *American Journal of Occupational Therapy*, 52, 7–10.
- Blumenthal, D., & Hsiao, W. (April 2, 2015). International health care system: lessons from the east – China's rapidly evolving health care system. *New England Journal of Medicine*. 372, 1281–1285. Retrieved from <http://www.nejm.org/doi/full/10.1056/NEJMp1410425#t=article> .
- Brandt, B.; Jones, J.; Kelly, E.; Schaad, N.; Swanson, C.; and Zajac, E., "Improving Pediatric Occupational Therapy in China" (2014). [Unpublished] *Innovative Practice Projects*. Paper 55. Retrieved from <http://commons.pacificu.edu/cgi/viewcontent.cgi?article=1038&context=ipp>].
- Brown, T., & Rodger, S. (1999). Research utilization models: Frameworks for implementing evidence based occupational therapy practice. *Occupational Therapy International*, 6(1), 1–23.

- Brown, T., Fong, K. N. K., Bonsaksen, T., Lan, T. W., Murdolo, Y., & Gonzalez, P. C. (2016). Approaches to learning among occupational therapy undergraduate students: A cross-cultural study. *Scandinavian Journal of Occupational Therapy*, 30 November [online], 1 – 12.
- Brown, T., Rodger, S., Brown, A., & Roever, C. (2005). A comparison of Canadian and Australian pediatric occupational therapists. *Occupational Therapy International*, 12(3), 137–161.
- Brown, T., Tseng, M. H., Casey, J., McDonald, R., & Lyons, C. (2010a). Research knowledge, attitudes, and practices of pediatric occupational therapists in Australia, the United Kingdom, and Taiwan. *Journal of Allied Health*, 39(2), 88–94.
- Brown, T., Tseng, M. H., Casey, J., McDonald, R., & Lyons, C. (2010b). Predictors of research utilization among pediatric occupational therapists. *OTJR: Occupation, Participation and Health*, 30(4), 173–183.
- Bryson, J.M. & Patton, M. G. (2015) Analyzing and engaging stakeholders. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, (Eds.). *Handbook of Practical Program Evaluation (4th ed.)* (pp. 36–61). San Francisco, CA: Jossey-Bass.
- Buchanan, H., Siegfried, N., & Jelsma, J. (2015). Survey instruments for knowledge, skills, attitudes and behavior related to evidence-based practice in occupational therapy: A systematic review. *Occupational Therapy International*, 23(2), 59–90.
- Bureau of Labor Statistics. (2016). Statisticians. Retrieved from <https://www.bls.gov/ooh/math/statisticians.htm> .
- Camden, C., Tétreault, S., & Swaine, B. (2010). Rehabilitation for children - How is it different from rehabilitation for adults?. In: J. H. Stone & M. Blouin, (Eds.). *International Encyclopedia of Rehabilitation*. Available online: <http://cirrie.buffalo.edu/encyclopedia/en/article/274/> .
- Caruth, G. (2014). Learning how to learn: A six point model for increasing student engagement. *Participatory Educational Research (PER)*, 1(2), 1–12. Downloaded April 1, 2016 from <http://files.eric.ed.gov/fulltext/ED552869.pdf> .
- Case-Smith, J. & O'Brien, J. C. (2010). *Occupational therapy for children*. Elsevier Health Sciences.
- Chinese Disabled Persons Federation (CDPF). (March 3, 2016). The historical development of China disabled persons' federation. Retrieved from http://www.cdcpf.org.cn/english/About/history_1798/ .

Colquhoun, H. L., Letts, L. J., Law, M. C., MacDermid, J. C., & Missiuna, C. A. (2010). A scoping review of the use of theory in studies of knowledge translation. *Canadian Journal of Occupational Therapy, 77*, 270–279.

Cost Helper Health. (n.d.). Occupational therapy costs. Retrieved from <http://health.costhelper.com/occupational-therapy.html> .

Dazueconsulting. (n.d.). How to conduct online surveys in China without Survey Monkey. Retrieved at <http://daxue consulting.com/online-surveys-in-china/> .

Doe, E. (2015). China's great firewall gets taller. *The Wall Street Journal* (online). Retrieved from <http://www.wsj.com/articles/chinas-great-firewall-gets-taller-1422607143>.

Doll, J. D. (2010). *Program development and grant writing in occupational therapy: Making the connection*. Boston, MA: Jones & Bartlett Publishers.

Dunn, L., & Musolino, G. M. (2011). Assessing reflective thinking and approaches to learning. *Journal of Allied Health, 40*(3), 128–136.

DuToit, S., & Wilkinson, (2011). Promoting an appreciation for research-related activities: The role of occupational identity. *British Journal of Occupational Therapy, 74*(10), 489–493.

ERI Economic Research Institute. (2017). Salary Expert. Retrieved from <https://www.salaryexpert.com/salary/job/program-evaluation-consultant/united-states> .

Farmer, P. (2003). *Pathologies of power: Health, human rights, and the new war on the poor*. Berkeley: University of California Press.

Fazio, L.S. (2008). *Developing occupation-centered programs for the community* (2nd Ed.). Upper Saddle River, NJ: Prentice Hall.

Finlayson, M. & Van Denend, T. (2006). Data management. In G. Kielhofner. *Research in occupational therapy: Methods of inquiry for enhancing practice* (pp. 548–564). Philadelphia, PA: F. A. Davis Company.

Fisher, K. R., & Shang, X. (2013). Access to health and therapy services for families of children with disabilities in China. *Disability and Rehabilitation: An International Multidisciplinary Journal, 35*(25), 2157–2163. DOI: 10.3109/09638288.2013.770566 .

Fleming-Castaldy, R., & Gillen, G. (2013). Ensuring that education, certification, and practice are evidence-based. *American Journal of Occupational Therapy, 67*(3), 364–369.

Flottorp, S. A., Oxman, A. D., Krause, J., Musila, N. R., Wensing, M., Godychki-Cwirko, M., Baker, R., & Eccles, M. P. (2013). A checklist for identifying determinants of practice: A systematic review and synthesis of frameworks and taxonomies of factors that prevent or enable improvements in healthcare professional practice. *Implementation Science*, 8, 35, DOI: 10.1186/1748-5908-8-35.

Forsyth, K. & Kviz, F. J. (2006). Survey research design. In G. Kielhofner. *Research in occupational therapy: Methods of inquiry for enhancing practice* (pp. 91–109). Philadelphia, PA: F. A. Davis Company.

Fortune, T., & Kennedy-Jones, M. (2014). Occupation and its relationship with health and wellbeing: The threshold concept for occupational therapy. *Australian Occupational Therapy Journal*, 61, 293–298.

Fraser, L. (2013). OT foreign studies as an educational tool in post-professional programs. Retrieved from <http://occupational-therapy.advanceweb.com/Editorial/Content/PrintFriendly.aspx?CC=266714> .

Froyd, J. (2001). Developing a dissemination plan. In *31st Annual Frontiers in Education Conference, 2001*. (Vol. 2, pp. F2G-18). IEEE.

Glegg, S. M., & Holsti, L. (2010). Measures of knowledge and skills for evidence-based practices: A systematic review. *Canadian Journal of Occupational Therapy*, 77(4), 219–232.

Glegg, S. M., Livingston, R., & Montgomery, I. (2016). Facilitating interprofessional evidence-based practice in paediatric rehabilitation: Development, implementation and evaluation of an online toolkit for health professionals. *Disability and Rehabilitation*, 38(4), 391–399.

Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W. & Robinson, N. (2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 26(1), 13–24.

Grantham-McGregor, S., & International Child Development Committee. (2007). Early child development in developing countries. *The Lancet*, 369(9564), 60–67.

Graziani, T. (2015). Walk the Chat: 5 WeChat survey tools to help you learn more about your followers. Retrieved from <https://walkthechat.com/5-wechat-survey-tools-to-help-you-learn-more-about-your-followers/> .

Greber, C., Ziviani, J., & Rodger, S. (2011). Clinical utility of the four-quadrant model of facilitated learning: Perspectives of experienced occupational therapists. *Australian Occupational Therapy Journal*, 58(3), 187–194.

Health Cost Helper. (2017). Cost of occupational therapy. Retrieved from <http://health.costhelper.com/occupational-therapy.html> .

Hermes, S., Coppola, S., Sinclair, K., & Vroman, K. (2015, April 16). Occupational Therapy in China: Then and Now. [Poster 2009]. *Poster presented at the American Occupational Therapy Association Annual Conference*. Nashville, TN.

Hermes, S., Hu, D., Kuo, F., & Troutman, K. (2016, October 27). 6th Annual OT24VX web conference [Session 9]. *Connecting East to West: Less Than Two Degrees*. Podcast retrieved from <http://tinyurl.com/vx16session9MP4> .

Hermes, S., Hu, D., Ow, N., Chong, M., & Wang, Q. (2014, June 19). East Meets West: Building a Culturally Diverse Occupation Based Developmental Disabilities Course. [Poster 200668]. *Poster presented at the World Federation of Occupational Therapy Congress*. Yokohama, Japan.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.

Hood, S., Hopson, R. K. & Kirkhart, K. E. (2015). Culturally Responsive Evaluation. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, (Eds.). *Handbook of Practical Program Evaluation (4th ed.)* (pp. 281–317). San Francisco, CA: Jossey-Bass.

Hong Kong Society for Rehabilitation (HKSR). (2015). Website. Retrieved from www.rehabsociety.org.hk .

Hong Kong Society for Rehabilitation (HKSR). (2017, January 14). History of INTCN. Video presented at the 2017 International Rehabilitation Symposium: Looking Forward to 2020 in Shenzhen, China.

Hou, Q. (August 13, 2016). China plans to establish university for disability rehabilitation. Retrieved from http://news.xinhuanet.com/english/2016-08/31/c_135648569.htm .

Iwama, M. K., Thomson, N. A., Macdonald, R. M., Iwama, M. K., Thomson, N. A., & Macdonald, R. M. (2009). The Kawa model: The power of culturally responsive occupational therapy. *Disability and rehabilitation*, 31(14), 1125–1135.

Jaffe, L., Humphry, R., & Case-Smith, J. (2010). Working with Families. In J. Case-Smith & J. C. O'Brien (eds.), *Occupational therapy for children*. (6th ed.). (pp. 108–140). Mosby Elsevier.

Jacob, K. (Spring, 2017). SAR OT925OL Capstone [webpage lecture content]. Retrieved from <https://onlinecampus.bu.edu/webapps/blackboard> .

Kielhofner, G. (2006). *Research in occupational therapy: Methods of inquiry for enhancing practice*. Philadelphia, PA: F. A. Davis Company.

Kielhofner, G. (2006). Characteristics of sound inquiry and the research process. In G. Kielhofner, *Research in occupational therapy: Methods of inquiry for enhancing practice*. (pp. 36–45). Philadelphia, PA: F. A. Davis Company.

Kennedy, P. (2002). Learning cultures and learning styles: Myth-understandings about adult (Hong Kong) Chinese learners. *International Journal of Lifelong Education*, 21(5), 430–445.

King, G. (2009). A framework of personal and environmental learning-based strategies to foster therapist expertise. *Learning in Health and Social Care*, 8(3), 185–199.

King, G., Bartlett, D. J., Currie, M., Gilpin, M., Baxter, D., Willoughby, C., Tucker, M. A., & Strachan, D. (2008a). Measuring the expertise of paediatric rehabilitation therapists. *International Journal of Disability, Development and Education*, 55(1), 5–26.

King, G., Currie, M., Barlett, D. J., Strachan, D., Tucker, M. A. & Willoughby, C. (2008b). The development of expertise in paediatric rehabilitation therapists: The roles of motivation, openness to experience, and types of caseload experiences. *Australian Occupational Therapy Journal*, 55, 108–122. Doi:10.1111/j.140-1630.2007.00681.x .

King, G., Tam, C., Fay, L., Pilkington, M., Servais, M., & Petrosian, H. (2011). Evaluation of occupational therapy mentorship program: Effects on therapists' skills and family-centered behavior. *Physical & Occupational Therapy in Pediatrics*, 31(3), 245–262.

Kitson, A. L., Rycroft-Malone, J., Harvey, G., McCormack, B., Seers, K., & Titchen, A. (2008). Evaluating the successful implementation of evidence into practice using the PARIHS framework: Theoretical and practical challenges. *Implementation Science*, 3(1), 1–12.

KTDRR: Air: Center on knowledge translation for disability and rehabilitation research. (2016) Retrieved from http://ktdrr.org/ktlibrary/articles_pubs/ktmodels/ .

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2nd ed.). Cambridge Books: New York, NY.

Kronenberg, F., Pollard, N., & Ramugondo, E. (2011). Introduction: Courage to dance politics. In F. Kronenberg, N. Pollard, & D. Sakellariou (Eds.). *Occupational therapies without borders: Towards an ecology of occupation based practices, Volume 2* (pp. 1–16). New York, NY: Churchill Livingstone Elsevier.

Kuipers, K., & Grice, J. W. (2009). The structure of novice and expert occupational therapists' clinical reasoning before and after exposure to a domain-specific protocol. *Australian Occupational Therapy Journal*, 56(6), 418–427.

Krueger, R. A., & Casey, M. A. (2015). Focus group interviewing. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, (Eds.). *Handbook of Practical Program Evaluation (4th ed.)* (pp. 344 – 382). San Francisco, CA: Jossey-Bass.

Law, M., Missiuna, C., & Pollock, N. (2008). Knowledge translation: An essential competency in the 21st century. Retrieved from <http://www.caot.ca/otnow/sept%2008/century.pdf> .

Law, M., Missiuna, C., & Pollock, N. (2008). Knowledge exchange and translation: An essential competency in the twenty-first century. *Occupational Therapy Now*, 10(5), 3–5.

LeDeu, F., Parekh, R., Zhang, F., & Zhou, G. (November, 2012). Healthcare in China: Entering “uncharted waters”. In Insights and Publications. Retrieved from http://www.mckinsey.com/insights/health_systems_and_services/health_care_in_china_entering_uncharted_waters .

Lencucha, R., Kothari, A., & Rouse, M. J. (2007). Knowledge translation: A concept for occupational therapy? *The American Journal of Occupational Therapy*, 61(5), 593.

LIH Healthcare Olivia's Place. (2013). Website. Retrieved from <http://www.oliviasplace.org/> .

Lim, K.H. & Duque, R. L. (2011). The challenge for occupational therapy in Asia: becoming an inclusive, relevant, and progressive profession. In F. Kronenberg, N. Pollard, & D. Sakellariou (Eds.), *Occupational therapies without borders: Towards an ecology of occupation based practices, Vol 2.* (pp 103–112). New York, NY: Churchill Livingstone Elsevier.

Lin, G. (2011). Development of Occupational Therapy in China Mainland: Opportunities and Challenges. Retrieved from <https://ot4ot.files.wordpress.com/2011/10/linguohui-abstract-final.pdf> .

Lin, G. (2014). Development of Occupational Therapy in Mainland China. [Lecture presentation] Lecture presentation at the World Federation of Occupational Therapist Congress, Yokohama, Japan.

Mattingly, C. & Hayes-Fleming, M. (1994). *Clinical reasoning: Forms of inquiry in a therapeutic practice.* F. A. Davis: Philadelphia, PA.

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, 2001(89), 3–14.

- Metzler, M. J., & Metz, G. A. (2010). Translating knowledge to practice: An occupational therapy perspective. *Australian Occupational Therapy Journal*, *57*, 373–379.
- Meyer, J., & Land, R. (2006). Issues of Luminality. In J. H. F. Meyer & R. Land (Eds.). *Overcoming barriers: Threshold concepts and troublesome knowledge* (pp. 19–32). New York, NY: Taylor & Francis Group.
- Miller, B. K. & Nelson, D. (2004). Constructing a program development proposal for community-based practice: A valuable learning experience for occupational therapy students. *Occupational Therapy in Health Care*, *18*, 137–150. DOI: 10.1080/J003v18n01_14.
- Mu, K., Brown, T., Peyton, C. G., Rodger, S., Huang, Y. H., Wu, C. Watson, C., Stagnitti, K., Hutton, E., Casey, J., & Hong, C. S. (2010a). Occupational therapy students' attitudes towards inclusion education in Australia, United Kingdom, United States and Taiwan. *Occupational Therapy International*, *17*(1), 40–52.
- Mu, K., Coppard, B.M., Bracciano, A., Doll, J., & Matthews, A. (2010b). Fostering cultural competency, clinical reasoning, and leadership through international outreach. *Occupational Therapy in Health Care*, *24*(1), 74–85.
- Mu, K., Peck, K., Jensen, L., Bracciano, A., Carrico, C., & Feldhacker, D. (2016). CHIP: Facilitating interprofessional and culturally competent patient care through experiential learning in China. *Occupational Therapy International*, *23*(4), 328–337.
- National Center for Dissemination of Disability Research. (2005). NCDDR Technical Brief 10: Focus – What is knowledge translation. Retrieved from <http://www.ncddr.org/kt/products/focus/focus10/> .
- Niemeyer, L. (Fall, 2016). SAR OT920 Outcomes, measurement and monitoring I: Program Evaluation [webpage lecture content]. Retrieved from <https://onlinecampus.bu.edu/webapps/blackboard> .
- Newcomer, K. E., & Triplett, T. (2015). Using surveys. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, (Eds.). *Handbook of Practical Program Evaluation (4th ed.)* (pp. 344–382). San Francisco, CA: Jossey-Bass.)
- Newcomer, K.E., Hatry, H.P. & Wholey, J.S. (2015). Planning and designing useful evaluations. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, (Eds.). *Handbook of Practical Program Evaluation (4th ed.)* (pp. 7–35). San Francisco, CA: Jossey-Bass.
- Nicola-Richmond, K. M., Pepin, G., & Larkin, H. (2016). Transformation from student to occupational therapist: Using the Delphi technique to identify the threshold concepts of occupational therapy. *Australian Occupational Therapy Journal*, *63*, 95–104.

- Niemeyer, L. (Fall, 2016). SAR OT920 Outcomes, measurement and monitoring I: Program Evaluation [webpage lecture content]. Retrieved from <https://onlinecampus.bu.edu/webapps/blackboard> .
- Odawara, E. (2005). Cultural competency in occupational therapy: Beyond a cross-cultural view of practice. *American Journal of Occupational Therapy*, 59, 325–334.
- O’Flynn, J. (2015). Program development for occupational therapy education in Haiti: Strategic planning and case statement. [Unpublished] Doctor of Occupational Therapy Project. Paper 3. Downloaded on September 29, 2015 from http://sophia.stkate.edu/otd_projects/3.
- Purvis, S. (2000). Community-based rehabilitation in China: A commentary. *Asia Pacific Disability Rehabilitation Journal*. In Jan Selected Readings Series 1, pp. 136–148. (Journal Article). Downloaded on August 1, 2015 from http://english.aifo.it/disability/apdrj/selread100/cbr_china_purves.pdf .
- Quick, L., Forsyth, K., & Melton, J. (2007). From graduate to reflective practice scholar. *British Journal of Occupational Therapy*, 70(11), 471–474.
- Rodger, S., Clark, M., Banks, R., O’Brien, M., & Martinez, K. (2009). A comparison of international occupational therapy competencies: Implications for Australian standards in a new millennium. *Australian Occupational Therapy Journal*, 56 (6), 372–383.
- B/Rodger, S., & Ziviani, J. (Eds.). (2006). Occupational therapy with children: Understanding children’s occupational and enabling participation. Blackwell Publishing.
- Ryan, J., & Slethaug, G., Eds. (2010). *International education and the Chinese learner*, Hong Kong University Press, HKU. Downloaded on April 25, 2016 from <https://muse-jhu-edu.ezproxy.bu.edu/book/709> .
- Schack, M., Halverson, K., Chau, E., & Woolfe, E. (2012). Enhancing care of children with disabilities in China. [Unpublished] *Innovative Practice Projects*. Paper 24. Retrieved from http://commons.pacificu.edu/ipp/24/?utm_source=commons.pacificu.edu%2Fipp%2F24&utm_medium=PDF&utm_campaign=PDFCoverPages .
- Scheidegger, G., & Torrance-Foggin, M. E. (2015). Occupational therapy and cultural understanding: Cross-cultural experiences in a newly established occupational therapy service in Qinghai Province, China. *World Federation of Occupational Therapists Bulletin*, 71(2), 88–95.
- Schell, B., & Schell, J. (2008). *Clinical and professional reasoning in occupational therapy*. Baltimore, MD: Lippincott Williams & Wilkins.

- Shi, Y., & Howe, T. H. (2016). A survey of occupational therapy practice in Beijing, China. *Occupational Therapy International*, 23, 186–195.
- Siebert, C. (2003, June). Communication home and community expertise: The occupational therapy practice *AOTA Home & Community Health Special Interest Section Quarterly*, 1–4.
- Sinclair, K. (2015, April). Supporting occupational therapy education in China. [Poster] American Occupational Therapy Association (AOTA) annual conference, Nashville, TN.
- Sinclair, K., & Cao, M. (2017). The evolution of occupational therapy as a profession in the People's Republic of China. In D. Sakellariou & N. Pollard (Eds.). *Occupational therapies without borders: Integrating justice with practice* (2nd Ed.). New York, NY: Churchill Livingstone Elsevier.
- Singh, M. (2002). Institutionalising lifelong learning: Creating conducive environments for adult learning in the Asian context. UNESCO Institute for Education, Hamburg. Retrieved from <http://www.unesco.org/education/uie/pdf/ILLBOOK.pdf> .
- Sirkka, M., Zingmark, K., & Larsson-Lund, M. (2014). A process for developing sustainable evidence-based occupational therapy practice. *Scandinavian Journal of Occupational Therapy*, 21, 429–437.
- Taylor, R. R., & Keilhofner, G. (2006). Collecting data. In G. Kielhofner, *Research in occupational therapy: Methods of inquiry for enhancing practice*. (pp. 530–544). Philadelphia, PA: FA Davis Company:
- Taylor, R. R., Suarez-Balcazar, Y., Pepin, G., & White, E. (2006). Obtaining funding for research. In G. Kielhofner, *Research in occupational therapy: Methods of inquiry for enhancing practice*. (pp. 486–514). Philadelphia, PA: FA Davis Company:
- Tetroe, J. (2007). Knowledge translation at the Canadian Institutes of Health Research: A primer. Technical Brief No. 18. Retrieved from http://ktdrr.org/ktlibrary/articles_pubs/ncddrwork/focus/focus18/ .
- Thomas, A., Saroyan, A., & Dauphinee, W. D. (2011). Evidence-based practice: A review of theoretical assumptions and effectiveness of teaching and assessment interventions in health professions. *Advances in Health Sciences Education: Theory and Practice*, 16(2), 253–276.
- Tse, Y. K., Cheng, W. C., Li-Tsang, W. P., Chan, Y. C., Tsang-Lau, K. P., So, S. P., Chiu, S. M., Tam, C. W., Yu, C., L., Chan, P. S., & Chui, Y. Y. (2005). Survey of occupational therapy practice in Hong Kong in 2004. *Hong Kong Journal of Occupational Therapy*, 15, 16–26.

- Tupe, D. A., Kern, S. B., Salvant, S., & Talero, P. (2015). Building international sustainable partnerships in occupational therapy: A case study. *Occupational Therapy International*, 22, 131–140.
- Unsworth, C., & Baker, A. (2016). A systematic review of professional reasoning literature in occupational therapy. *British Journal of Occupational Therapy*, 79(1), 5–16.
- Veras, M., Pottie, K., Cameron, D., Dahal, G. P., Welch, V., Ramsay, T., & Tugwell, P. (2013). Assessing and comparing global health competencies in rehabilitation students. *Rehabilitation Research and Practice*, 1–9. Downloaded from <http://dx.doi.org/10.1155/2013/208187> .
- Verma, S., Paterson, M., & Medves, J. (2006). Core competencies for health care professionals: what medicine, nursing, occupational therapy, and physiotherapy share. *Journal of Allied Health*, 35(2), 109–115.
- Wambeam, R. A. (2015). *The community needs assessment workbook*. Chicago, IL: Lyceum Books, Inc.
- Wang, V. C. X. (2008). Adult education philosophies in post-modern China. *International Forum of Teaching and Studies*, 4(1), 21–38.
- Wang, V. C. X., & Farmer, L. (2008), Adult teaching methods in China and Bloom's taxonomy. Article 13. *International Journal for the Scholarship of Teaching and Learning*, 2(2), 1–16. . Retrieved from <http://digitalcommons.georgiasouthern.edu/ij-sotl/vol2/iss2/13> .
- Wang, V. C. X., & Kreysa, P. (2006). Instructional strategies of distance education instructors in China. *The Journal of Educators Online*, 3(1), 1–25.
- Wang, V. C. X. (2014). Adult learners' perceptions of the teaching preferences of online instructors. *International Journal of Instructional Technology and Distance Learning*, 4 (6), 1 –9.
- Watkins, D. A., & Biggs, J. B. (Eds.) (2005). *The Chinese Learner: Cultural, Psychological and Contextual Influences*. Hong Kong, China: Comparative Education Research Centre, CERC.
- Wholey, J. S. (2015). Exploratory evaluation. In K.E. Newcomer, H.P. Hatry, & J.S. Wholey. (Eds.) *Handbook of practical program evaluation* (pp. 88–107). San Francisco, CA: Jossey-Bass.
- Wilcock, A. (2006). *An occupational perspective on health (2nd Ed.)*. Thorofare, NJ: Slack.

- Wilding, C., Curtin, M., & Whiteford, G. (2012). Enhancing occupational therapists' confidence and professional development through a community of practice scholars. *Australian Occupational Therapy Journal*, 59, 312–318.
- Wong, S. R., & Fisher, G. (2015). Comparing and using occupation-focused models. *Occupational Therapy in Health Care*, 29(3), 297–315. DOI: 10.3109/07380577.2015.1010130
- World Confederation of Physical Therapists. (October 11, 2016). Position statement: Autonomy. Retrieved from <http://www.wcpt.org/policy/ps-autonomy> .
- World Health Organization (WHO). (2017). Constitution of WHO: Principles. Retrieved from <http://www.who.int/about/mission/en/> .
- World Health Organization (WHO). (2012.). Knowledge translation framework for aging and health. Retrieved from http://www.who.int/ageing/publications/knowledge_translation.pdf?ua=1 .
- World Federation of Occupational Therapists. (2008a). Developing, Occupational Therapy profession in countries which are not yet members of WFOT: A resource package. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .
- World Federation of Occupational Therapists. (2008b). Entry-level competencies for occupational therapists. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .
- World Federation of Occupational Therapists. (2009). Guiding principles to diversity and culture. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .
- World Federation of Occupational Therapists. (2010). Statement on Occupational therapy. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .
- World Federation of Occupational Therapists. (2012). Position statement: Competency and maintaining competency. *World Federation of Occupational Therapists Bulletin*, 66(1), 20–21.
- World Federation of Occupational Therapists. (2014a). Establishing an Occupational Therapy Association and applying for membership in the World Federation of Occupational Therapists (WFOT): Revised. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .
- World Federation of Occupational Therapists. (2014b). Position statement: Specialization and advanced occupational therapy competencies. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .

World Federation of Occupational Therapists. (2016a). An introduction to the World Federation of Occupational Therapists. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .

World Federation of Occupational Therapist. (2016b). Member organizations. Retrieved from <http://www.wfot.org/Membership/CountryandOrganisationProfiles.aspx> .

World Federation of Occupational Therapists. (2016c). Minimum standards for the education of occupational therapists: Revised. [In press].

World Federation of Occupational Therapists. (2016d). Position Statement: Ethics, sustainability, and global experiences. Retrieved from <http://www.wfot.org/ResourceCentre.aspx> .

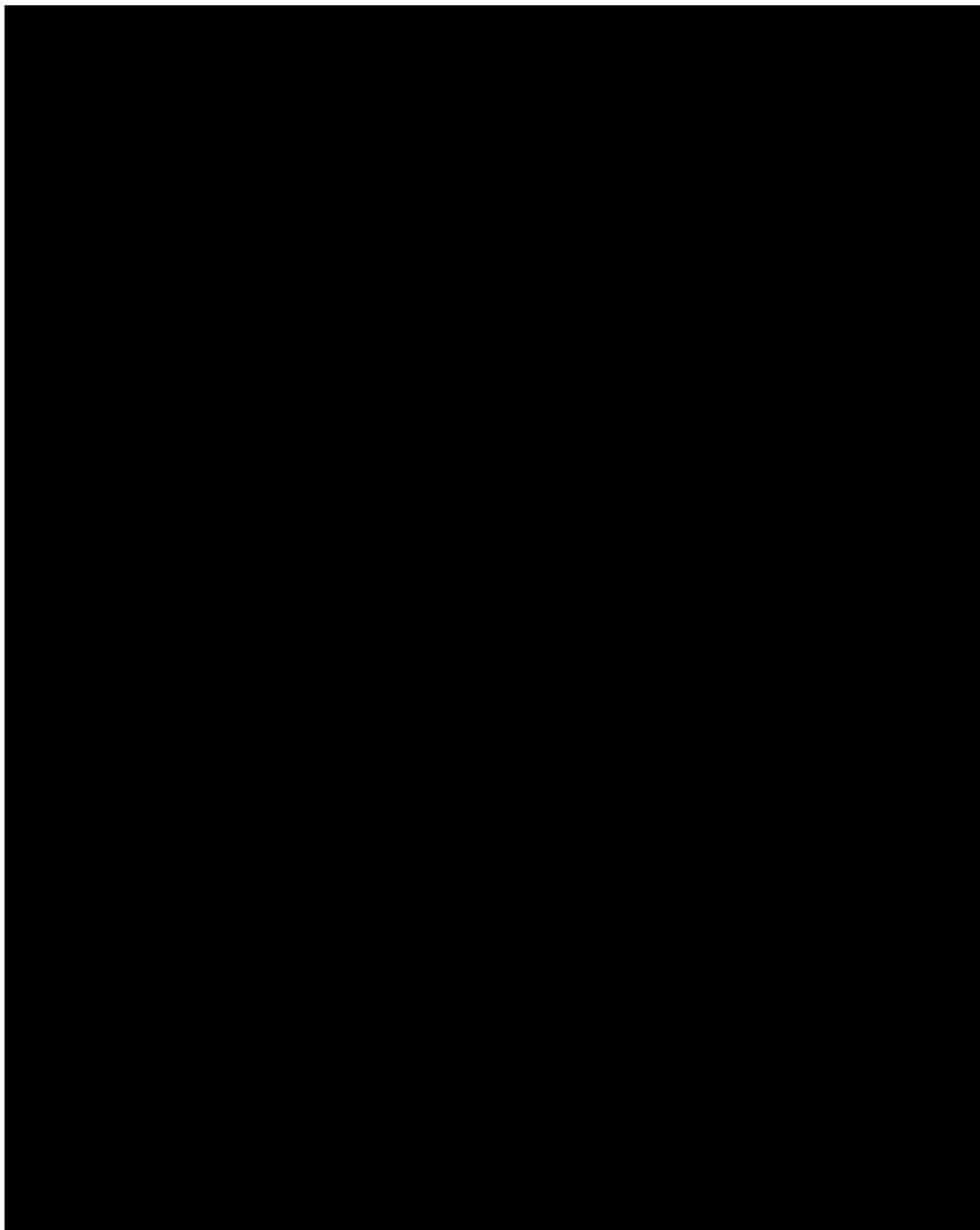
Wu, K.B., Young, M. E., & Cai, J. (2012). Early Childhood Development in China: breaking the cycle of poverty and improving future competitiveness. The World Bank, Washington, D.C.

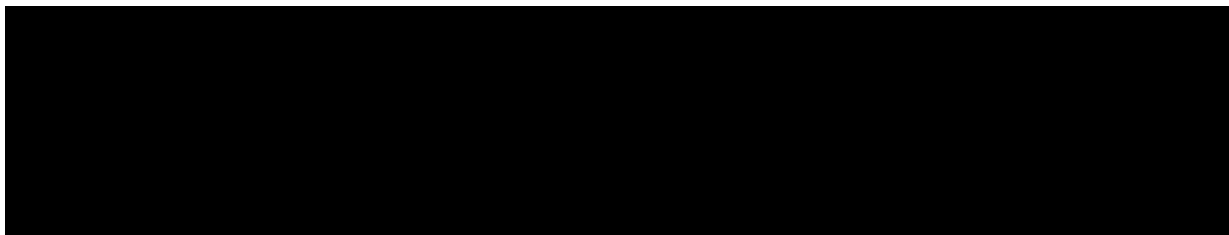
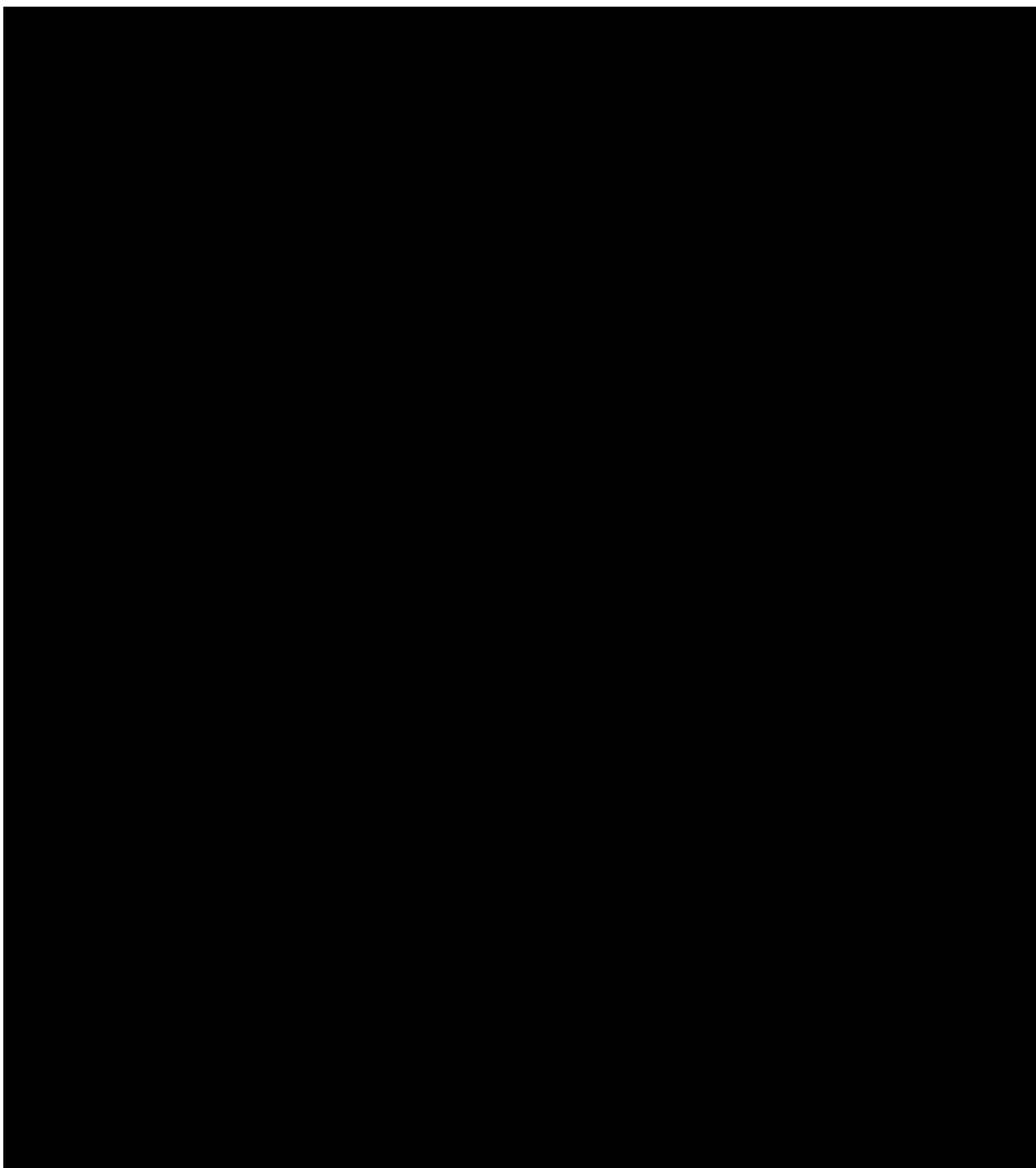
Yan, Y., Sinclair, K, & Penman, M. (2012). Using social networking for professional development of occupational therapy throughout the People's Republic of China. *WFOT Bulletin*, 66, 47–49.

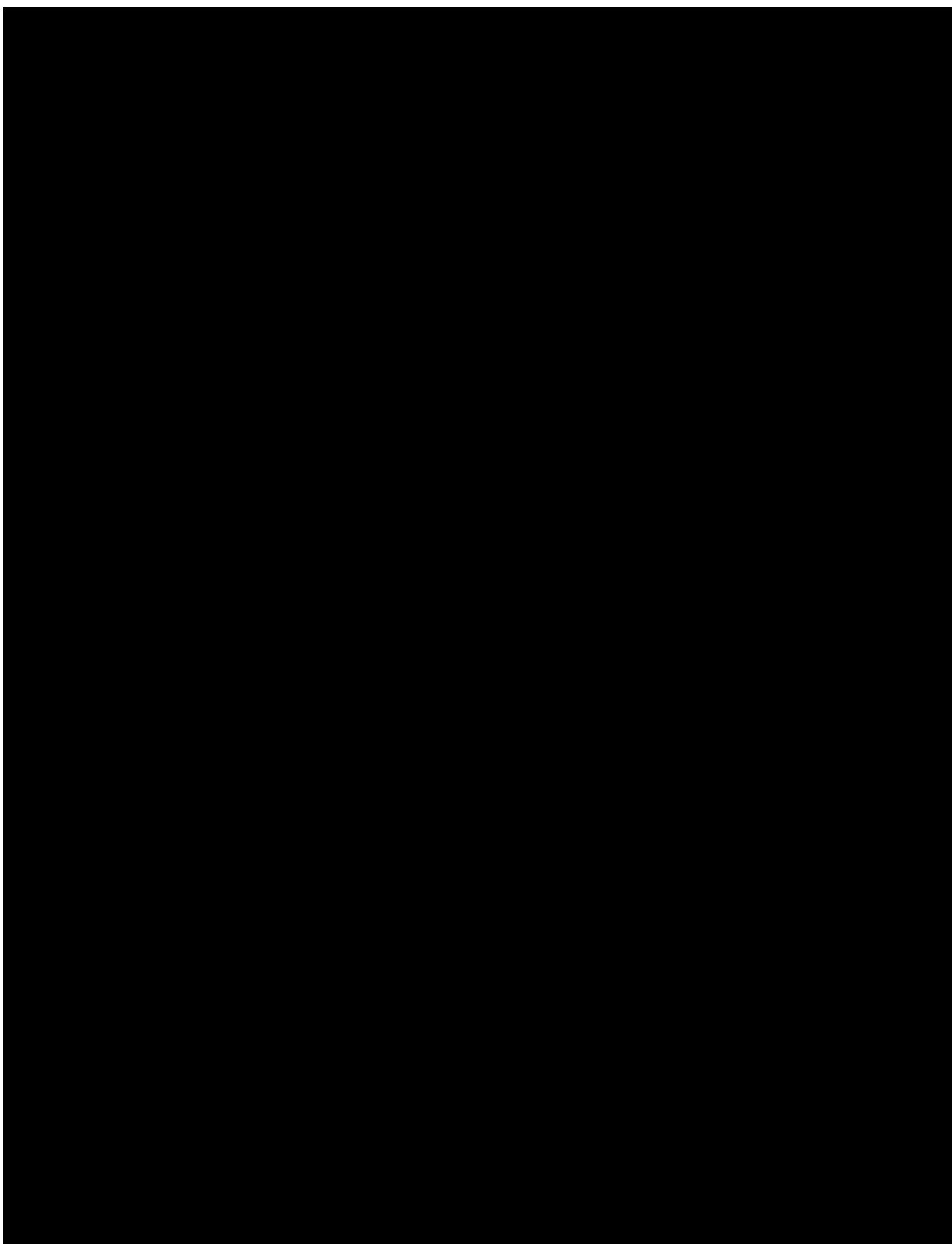
Zheng, X., Chen, G., Song, X., Liu, J., Yan, L., Du, W., Pang, L., Zhang, L., Wu, J., Zhang, B., & Zhg J. (2011). Twenty-year trends in the prevalence of disability in China. *Bulletin of the World Health Organization*. 89, 788–797. doi 10.2471/BLT.11.089730. Retrieved from <http://www.who.int/bulletin/volumes/89/11/11-089730/en> .

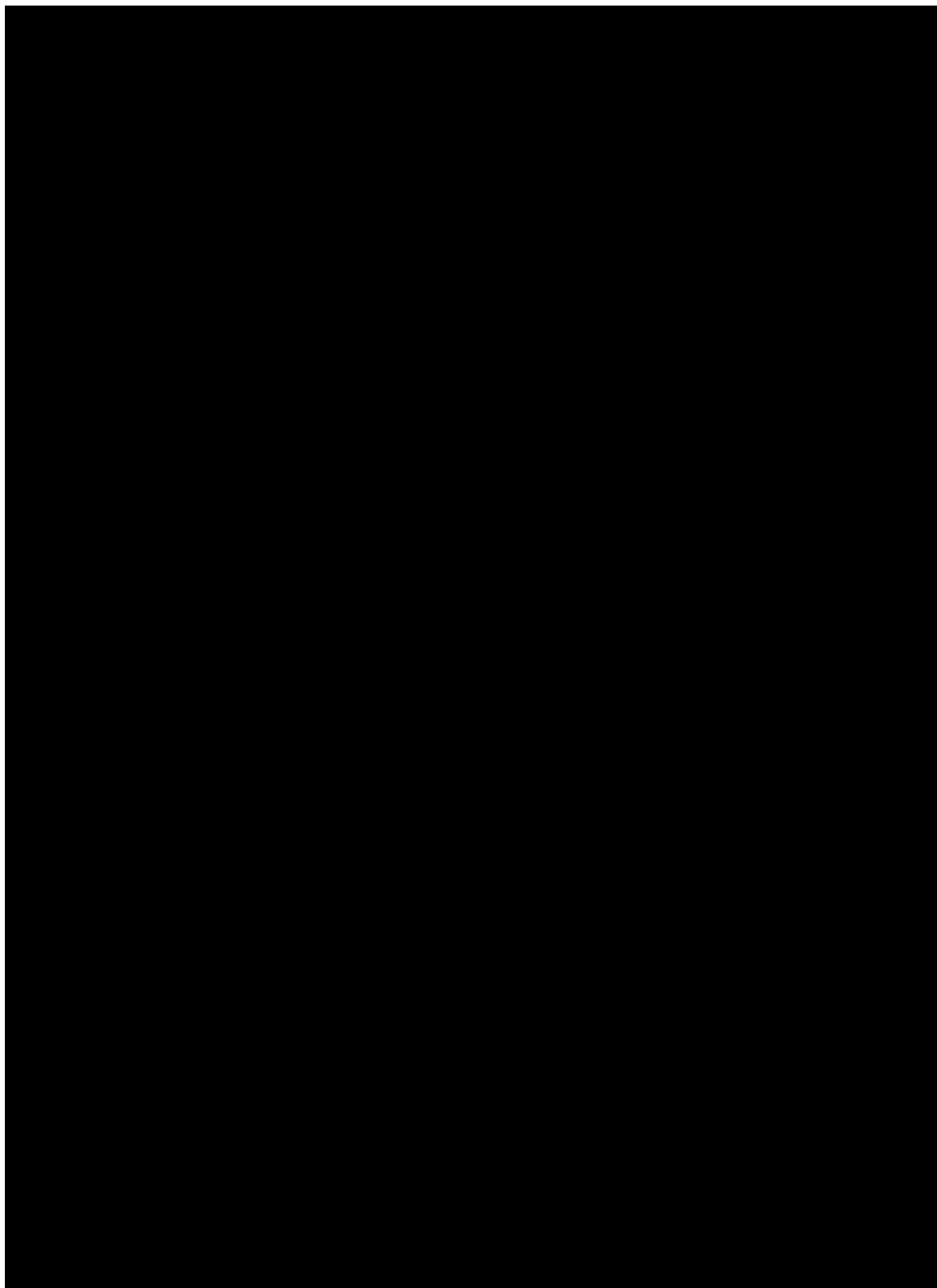
Zhou, H. D. (2006). Present Situation and Future Development of Occupational Therapy in China. Retrieved from [http://www.hkjot-online.com/article/S1569-1861\(09\)70036-1/pdf](http://www.hkjot-online.com/article/S1569-1861(09)70036-1/pdf) .

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