

Developing a Sensory Processing Workshop for Rehabilitation Therapists in China



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BACKGROUND

LIH Olivia's Place is a network of pediatric therapy clinics in China and the pediatric division of LIH Healthcare. The core vision of LIH Healthcare is "to enable all people of China to access high-quality, evidence-based, interdisciplinary rehabilitation services." However, the majority of rehabilitation therapists in China are educated as OT/PT/SLP/Chinese medicine generalists with only a few OTs who graduated from programs meeting standards recognized by the World Federation of Occupational Therapy (WFOT). As rehabilitation advances in China, these rehabilitation therapists need additional education to increase their abilities to deliver high quality services. One area of need identified by therapists at LIH Olivia's Place is sensory processing (i.e., how the brain receives, interprets, and uses sensations to produce appropriate behavior^{1, 2, 3}). The purpose of this project was to design a sensory processing workshop to equip rehabilitation therapists in China with knowledge to address the sensory needs of their pediatric clients as part of a series of professional development workshops offered by LIH Olivia's Place.

CONTEXT

Need for OT Providers in China

- Many unspecialized Chinese-trained rehabilitation therapists
- Fewer providers from WFOT recognized educational programs:
 - Internationally-trained OTs
 - Chinese-trained OTs

LIH Olivia's Place

- Committed to providing continuing education for therapists
- Established series of educational workshops for therapists
- In need of educational resources for professional development and advocacy

Factors Impacting Project

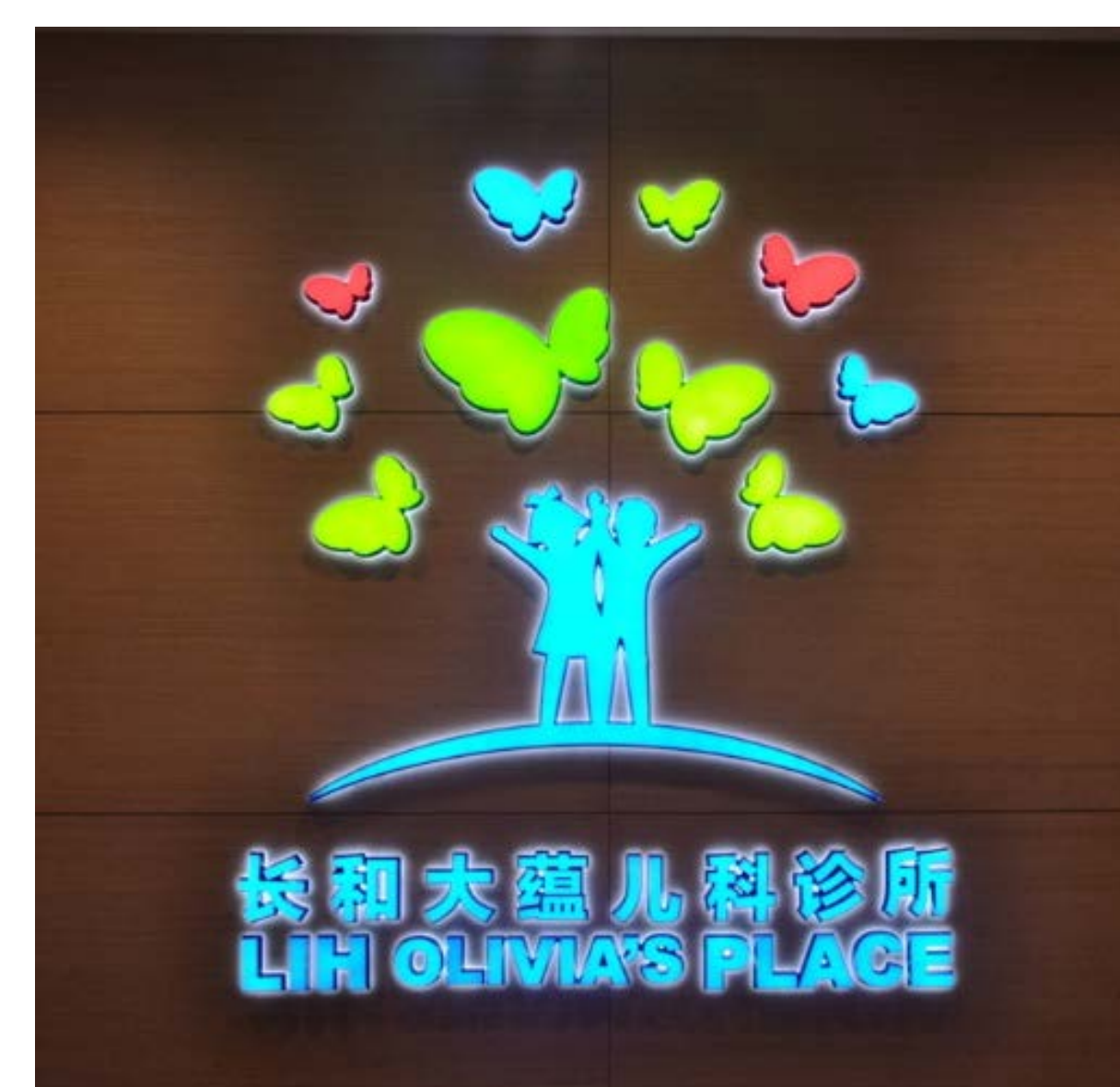
Conditions in China

- Intense sensory exposures (e.g., smoke, pollution, & construction noise) are common in China
- Sensory exposures can aggravate negative behaviors in children
- Parents are seeking services related to management of their children's behavior

WORKSHOP DEVELOPMENT

To complete the project, we:

- Gathered research evidence related to sensory processing
- Conducted a needs assessment consisting of questionnaires, email exchanges, consultations with community mentors
- Reviewed LIH Olivia's Place online resources
- Developed a five-hour workshop consisting of a 126-slide interactive PowerPoint presentation with presenter notes, supplemental group activities, discussion questions, and handouts



Left: LIH Olivia's Place logo; Right: LIH Olivia's Place clinic locations

FINAL PRODUCT

PowerPoint Topics

- Theory of sensory processing
- Neuroscience
- Development related to sensory processing
- Evaluation
- Intervention
- Common diagnoses related to sensory processing

Applications

- Case studies
- Discussion questions
- Role playing
- Activity analysis by age group
- Occupational profile

Supplemental Handouts

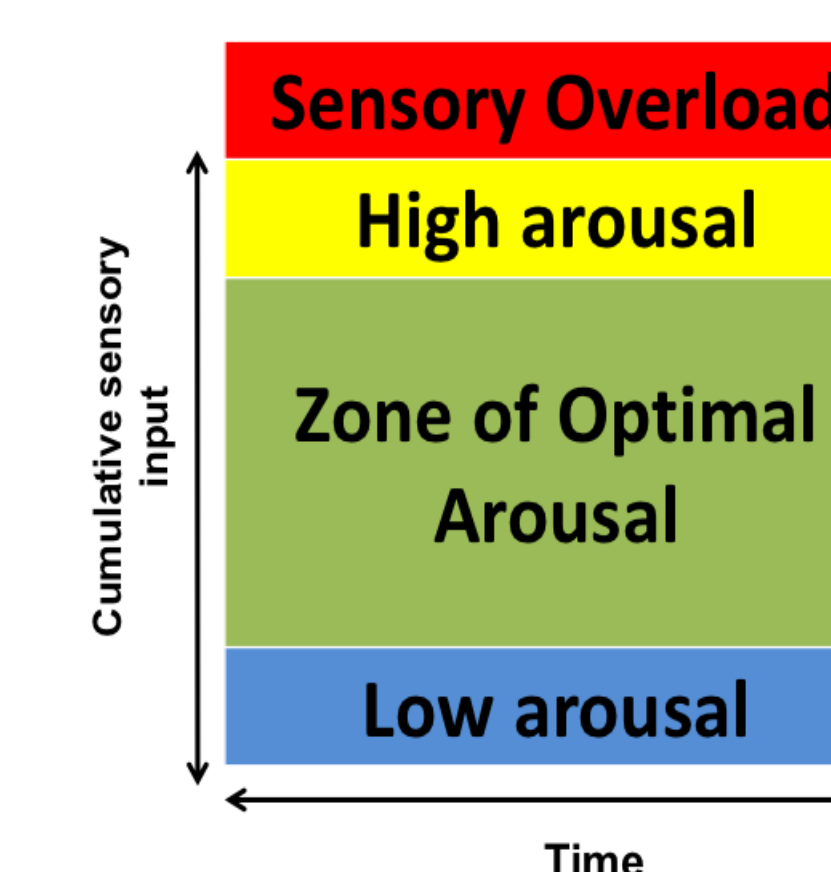
- Neuroscience review
- Developmental stages table
- Examples of sensory-based interventions by modality
- Print/online resources
- Activity worksheets

SAMPLE WORKSHOP MATERIALS

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Sensory-Based Zone of Arousal

Goal is to help the child maintain optimal level of arousal



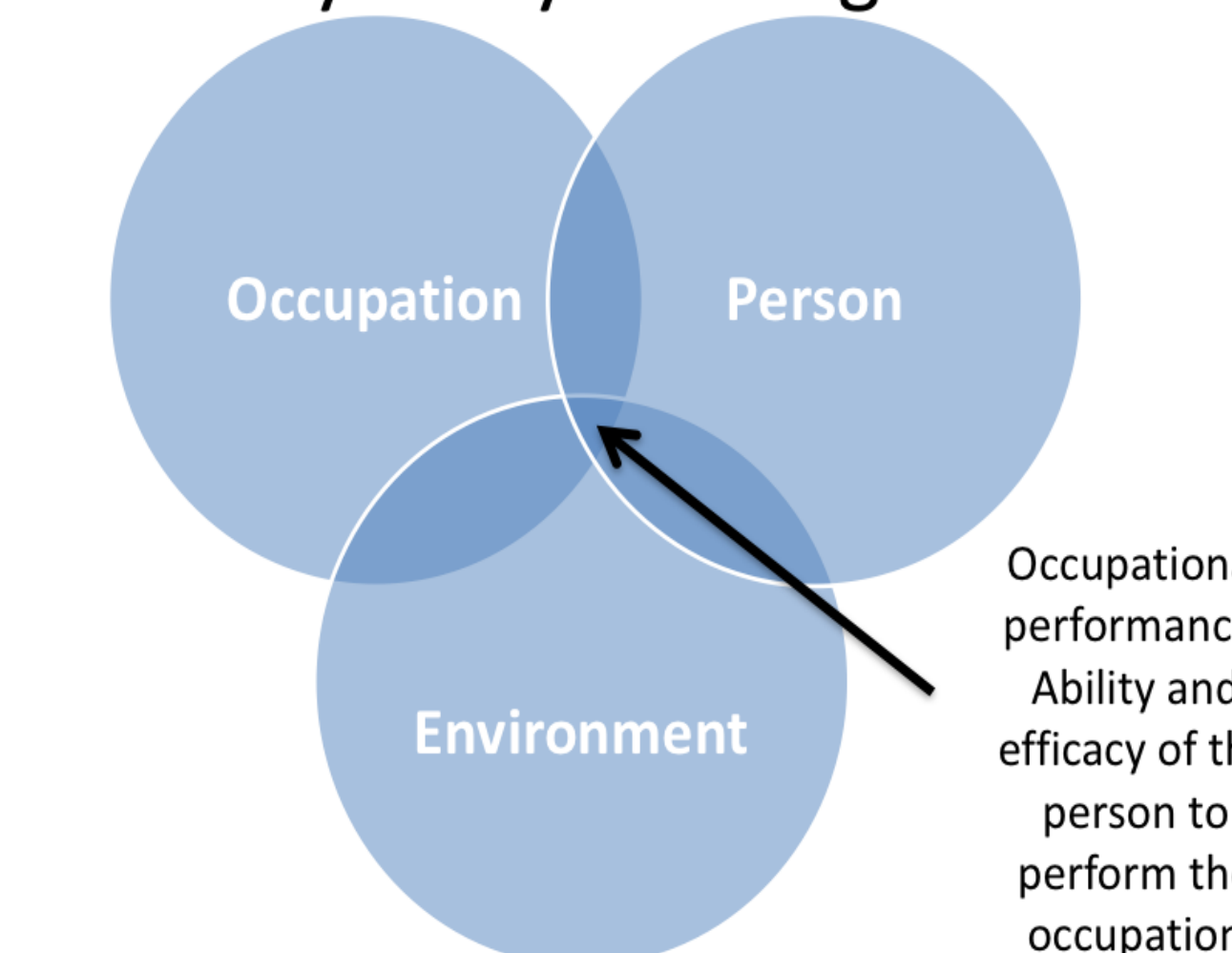
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Sensory-based intervention examples

Modality	Alerting	Calming/Organizing
Proprioceptive	N/A	Heavy work such as pushing, pulling, climbing, carrying
Vestibular	Fast, rotary, unpredictable swinging	Slow, linear, predictable swinging
Tactile	Light touch, extreme temperatures, varied textures	Firm touch, deep pressure
Visual	Bright lights, moving objects, many bright colors	Dim light or darkness, still objects, few colors
Auditory	Fast or loud music with an unpredictable rhythm	Soft, slow, rhythmic music
Olfactory	Intense odors such as peppermint, cloves, allspice, ginger, ginseng	Light odors such as lavender and vanilla
Gustatory	Intense sour, spicy, or sweet flavors	Bland flavors

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Activity analysis using PEO



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Application

- Qing Qing, a 7-year old child, aggressively pushes others away when they touch him. This occurs both at home and in the classroom.
- In groups of three, take turns explaining Qing Qing's sensory processing challenges:
 - One person explain as if you are talking to the child's parent
 - One person explain as if you are talking to the child's teacher
 - One person explain as if you are talking to the child

FUTURE PLANS

The workshop materials will be:

- Translated into Chinese by a team of medical translators
- Presented by occupational therapists working at LIH Olivia's Place
- Used as self-study for therapists working at LIH Olivia's Place
- Shared with other OT educators in China
- Expanded in future international collaborations

REFERENCES

- Star Institute for Sensory Processing Disorder (2016). *About SPD*. Retrieved from: <https://www.spdstar.org/basic/about-spd>
- Parham, L. D., & Mailloux, Z. (2015). Sensory integration. In J. Case-Smith & J. C. O'Brien (Eds.), *Occupational therapy for children and adolescents* (7th ed., pp 258-303). St. Louis, MO: Elsevier Mosby.
- Dunn, W. (2007). Supporting children to participate successfully in everyday life by using sensory processing knowledge. *Infants & Young Children*, 20(2) 84-101. <http://journals.lww.com/iycjournal/pages/default.aspx>