

Making Sense of Sensory: Occupational Therapists Empowering Caregivers Through Education

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Background & Significance

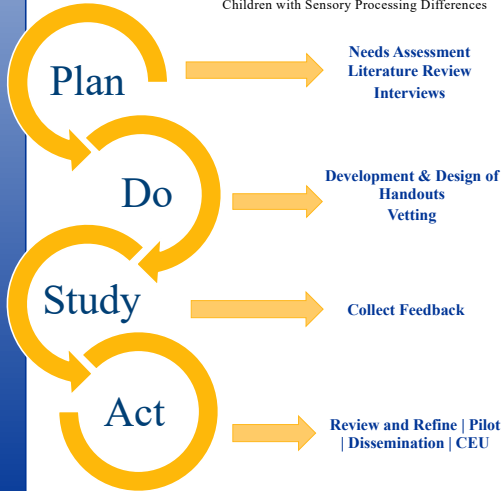
- UPMC Children's outpatient Occupational Therapy (OT) sites identified variability in sensory-based care and caregiver education across clinic locations.
- Therapists reported inconsistent use of resources, limited awareness of handouts, and reliance on non-standardized materials.
- Caregivers demonstrated mixed understanding of sensory strategies and variable ability to carry them over at home and in daily routines.
- Sensory-based pediatric OT relies heavily on caregiver understanding and follow-through outside of therapy.¹
- Caregiver follow-through is influenced by clarity, accessibility, and consistency of education², and variability in readability may impact understanding and engagement.³
- Inconsistency in education may affect continuity and quality of care.
- Stakeholder feedback emphasized the need for clearer, accessible, and standardized caregiver education, especially for children with higher sensory need.

Objectives

- Develop standardized, strengths-based educational handouts that link pediatric sensory needs to specific, vetted parent education materials.
- Increase therapist consistency and confidence in providing sensory-based caregiver education across all UPMC Children's sites.
- Improve caregiver understanding, health literacy, and carryover of sensory strategies at home and in daily routines.

Methodology

Participants: Therapists & Caregivers of Children with Sensory Processing Differences



Materials

The project materials consisted of 24 sensory based education resources using a standardized, symptom-based structure designed to help caregivers move from recognizing behaviors to understanding sensory contributors and embedding practical strategies into their routines.

Resource design features included:

- Standardized structure using sections:
 - What you might notice
 - Why it might be happening
 - What to try
 - How to fit it into your day
 - How you'll know it helped
 - If it didn't help, what to tell your OT
- Routine-based application
- Built-in collaboration sections
- Plain, jargon-free language
- Strong visual organization
- Diverse cartoon depictions
- Practical recommendations

How To Fit It into Your Day

Calming activities and strategies are most effective when provided if your child is distressed or showing signs of distress, before or during activities that require focus, before or while in public spaces, and before or during an assignment/task.

In the morning before...	In the afternoon before...	In the evening before...
<ul style="list-style-type: none"> Getting dressed Brushing teeth Going to school 	<ul style="list-style-type: none"> Schoolwork Transitions Lunch Toileting 	<ul style="list-style-type: none"> Brushing teeth Undressing Bedtime

from Body Prep: Calming Resource

What To Try

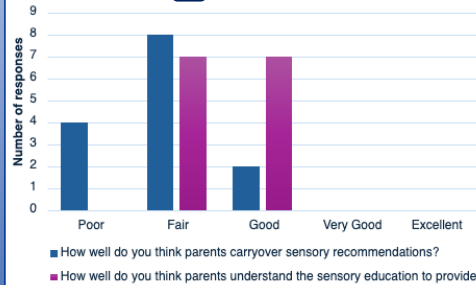
**Not a comprehensive list. If you need other ideas please discuss with your OT*

Pushing/Pulling	<ul style="list-style-type: none"> Wall or chair push-ups Push a full laundry basket or a box Help push the shopping cart 	
Jumping	<ul style="list-style-type: none"> Jumping on a mattress or couch cushion on the floor Jumping jacks or rocket jumps 	
Lifting	<ul style="list-style-type: none"> Carrying groceries or a laundry basket Carrying stacks of books Loading/unloading washer or dryer 	
Chewing/Sucking	<ul style="list-style-type: none"> Drinking thick liquids through a straw Chewing crunchy snacks or dried fruit 	
Playground	<ul style="list-style-type: none"> Climbing playground equipment or monkey bars Digging in dirt, sandbox, or garden Wheelbarrow walks or animal walks 	
Squeezing/Deep Pressure	<ul style="list-style-type: none"> Squeezing play dough, Thera-putty, or stress balls Big, firm bear hugs Weighted stuffed animal or lap item 	
Older Teen/Adult	<ul style="list-style-type: none"> Swimming Resistance bands or weight training Rock climbing or rowing 	

from Heavy Work Resource

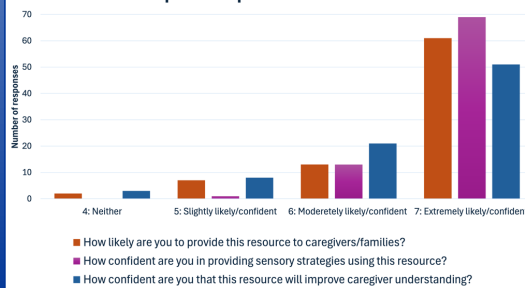
Results

1 Pre-Intervention Findings



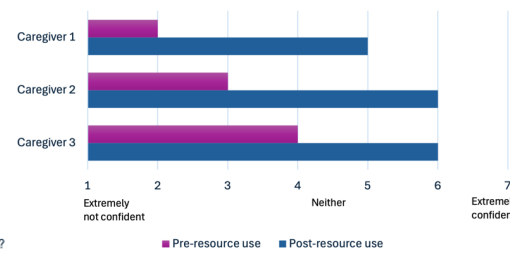
2 Resource Feedback During Development

Compared to previous resources....



3 Immediate Post-Implementation Findings

Confidence in using sensory strategies at home



1

- Most therapists rated caregiver carryover as poor or fair.
- Therapist perceptions of caregiver understanding were fair or good.

2

- Therapists reported they were...
- Extremely confident in providing sensory strategies using these resources
 - Moderately to extremely confident that the resources would improve caregiver understanding

3

- Caregiver confidence ratings for...
- Pre-resource use ranged from moderately not confident to neutral.
 - Post-resource use ranged from slightly confident to moderately confident.

Discussion

- Need for standardized, accessible, routine-based caregiver education in pediatric occupational therapy.
- Jargon-free format bridges gap between therapist recommendations and home use.
- Caregiver and therapist perceptions of confidence initially misaligned.
- Materials increased caregiver confidence and therapist-rated carryover.
- Six consistent handout components provide clear, practical strategies.
- Strategies fit into daily routines (no extra time required).
- Feedback options support two-way communication and carryover.
- Occupational Therapists given vetted online resources and publications.
- DISCERN used to assess resource quality and reliability.

Clinical Implications

For clinicians, the peer network developed and implemented 24 educational resources which provides easily accessible resources ensuring consistency across sites. For caregivers and patients, the educational resources improves health literacy among caregivers and encourages caregiver carryover and reinforcement.

Conclusion

This project strengthened the delivery of sensory-based caregiver educational resources across UPMC Children's outpatient sites by revising existing materials and developing new resources, resulting in comprehensive, evidence-based handouts. The outcomes prove caregiver understanding and consistent implementation of evidence-based sensory strategies across outpatient settings.

Future Steps and Limitations

Future Steps

Future work should include UPMC Children's leadership updating and creating additional resources as new needs and research arise. It should also include the peer network collecting further therapist and caregiver feedback using Qualtrics or Microsoft Forms surveys.

Limitations

The project was limited by a small number survey responses, which may affect evaluation of usability and understanding. Additionally, development within a single health system limits generalizability, and the use of averaged pre- and post-survey data from different participants limits direct comparison.

References & Acknowledgments

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The authors would like to thank Carrie Isaaksy, MOT, OTR/L, Kimberly Kubistek, OTD, OTR/L, CNT, Kelsey Voltz-Poremba, CScD, OTR/L and all site coordinators for their guidance, support and expertise throughout this project. Additional thanks to UPMC Children's Hospital of Pittsburgh for their collaboration and support.