

## Background and Significance

- UPMC Children's Hospital of Pittsburgh Child Development Unit (CDU) provides evaluation services to children with developmental disabilities and associated disorders, and makes referrals to necessary health care and community services.
- Interdisciplinary knowledge of occupational therapy's (OT) role in addressing sensory processing can lead health professionals to make appropriate referrals in order to better support patient care.
- Pediatric residents rotating through the CDU have minimal knowledge of occupational therapy and when to refer.
- Understanding the role of OT along with sensory processing and its contribution to functional and behavioral outcomes is crucial to properly identify patient needs<sup>3</sup>.
- This is essential because children with sensory processing deficits may experience difficulties in their everyday occupations (ie. play, sleep, school, eating, etc.)<sup>1</sup>, which if not addressed early on, can lead to delays in development<sup>2</sup>.

## Objective

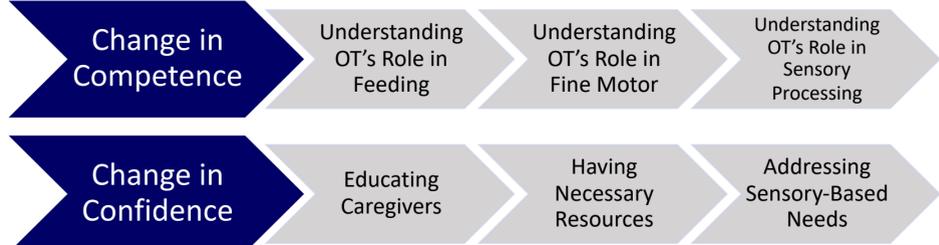
This multimodal program aimed to educate pediatric residents on sensory processing and OT's distinct value in order to provide pediatric residents with the knowledge and tools to better address sensory deficits in children, educate caregivers, and make appropriate referrals.

## Methods

### Participants:

- 4 cohorts (2-4 participants) of pediatric residents rotating through the CDU from January through April of 2020 (n=9)

### Outcome Measures: Pre/post self-assessment surveys



### Multimodal Education Program

Use of Plan Do Study Act (PDSA) Cycle from the Institute for Healthcare Improvement

#### Pre-Module

- Sensory Systems presentation
- Review of evidence-based article
- Independent review of literature
- Case study

#### In-Person Education Session

- Occupational Therapy's Distinct Value & Sensory Processing
- Case-based discussion and video examples
- Evidence review

## Results

Figure 1. Change in Resident Self-Perceived Competence

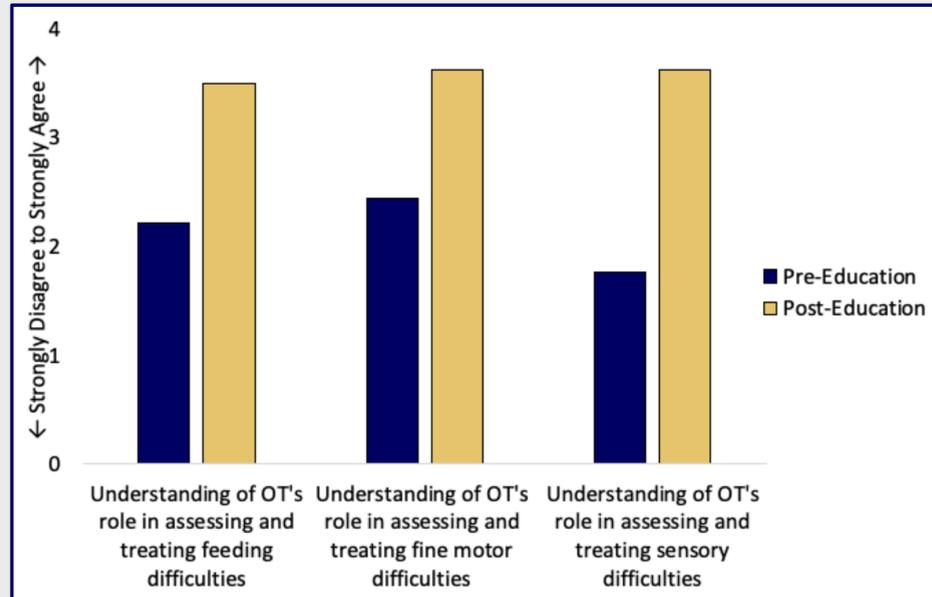
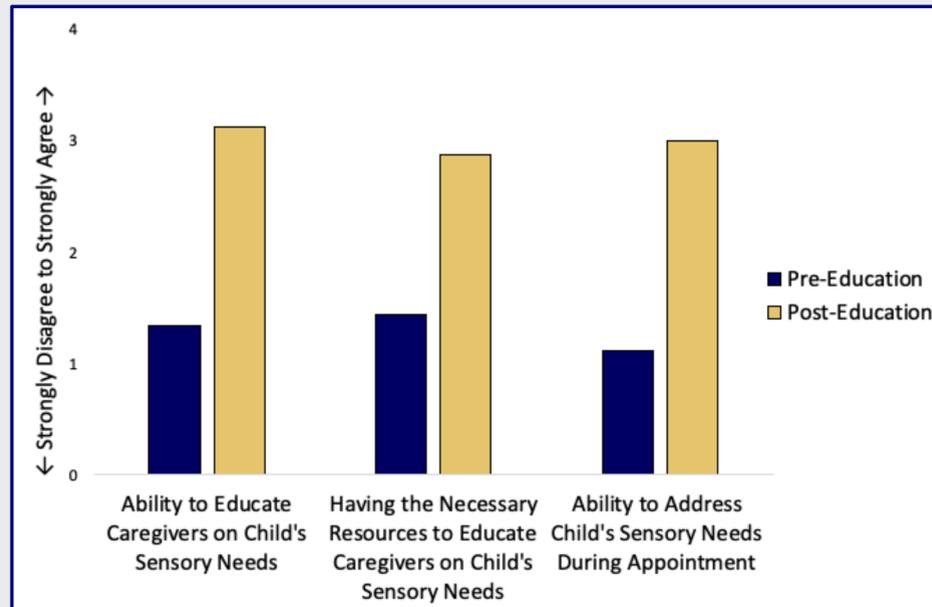


Figure 2. Change in Resident Self-Reported Confidence



- All pediatric residents who participated in the Multimodal Educational Program reported having previously referred a patient to OT for feeding and fine motor needs only. **Not sensory processing needs!**

- On the pre-education survey, 0% of residents reported that they felt confident in knowing when to refer a patient to OT.
- Confidence in knowing when to refer patients to OT increased to 100% following participation in the Multimodal Educational Program.

## Results

Increase in Self-Perceived Competence		Increase in Self-Reported Confidence	
Understanding Feeding	31.95 %	Educating Caregiver	44.80 %
Understanding Fine Motor	29.52 %	Having Adequate Resources	35.75 %
Understanding Sensory	46.19 %	Addressing Sensory Needs	47.22 %

## Discussion

### Conclusions

- Participation in the Program increased resident self-perceived competence in understanding OT's role in assessing and treating sensory-based difficulties.
- Confidence in defining OT and in the ability to educate caregivers on their child's sensory needs, having the necessary resources to educate caregivers on the child's sensory needs, and ability to address the child's sensory needs during an appointment also increased.

### Limitations

- Non-compliance completing the provided pre-education work
- Variability with delivery of education module
- One resident lost to follow up
- Sample limited to specific cohort within a short time frame

### Future Directions

- Expansion of the Multimodal Education Program to include a more comprehensive curriculum (i.e. feeding/oral motor, fine and gross motor, and mental health).
- Adaptation of the Multimodal Education Program to accommodate other health care disciplines and/or settings to allow for further knowledge.

## Implications for Occupational Therapy

- A Multimodal Educational Program is a useful method to disseminate information to other health professions.
- A Multimodal Educational Program can advocate for OT as a profession, and educate other professions on a variety of topics related to OT.
- Increased education and awareness of OT may improve the likelihood of referral to appropriate services sooner.

## Acknowledgements

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## References

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