

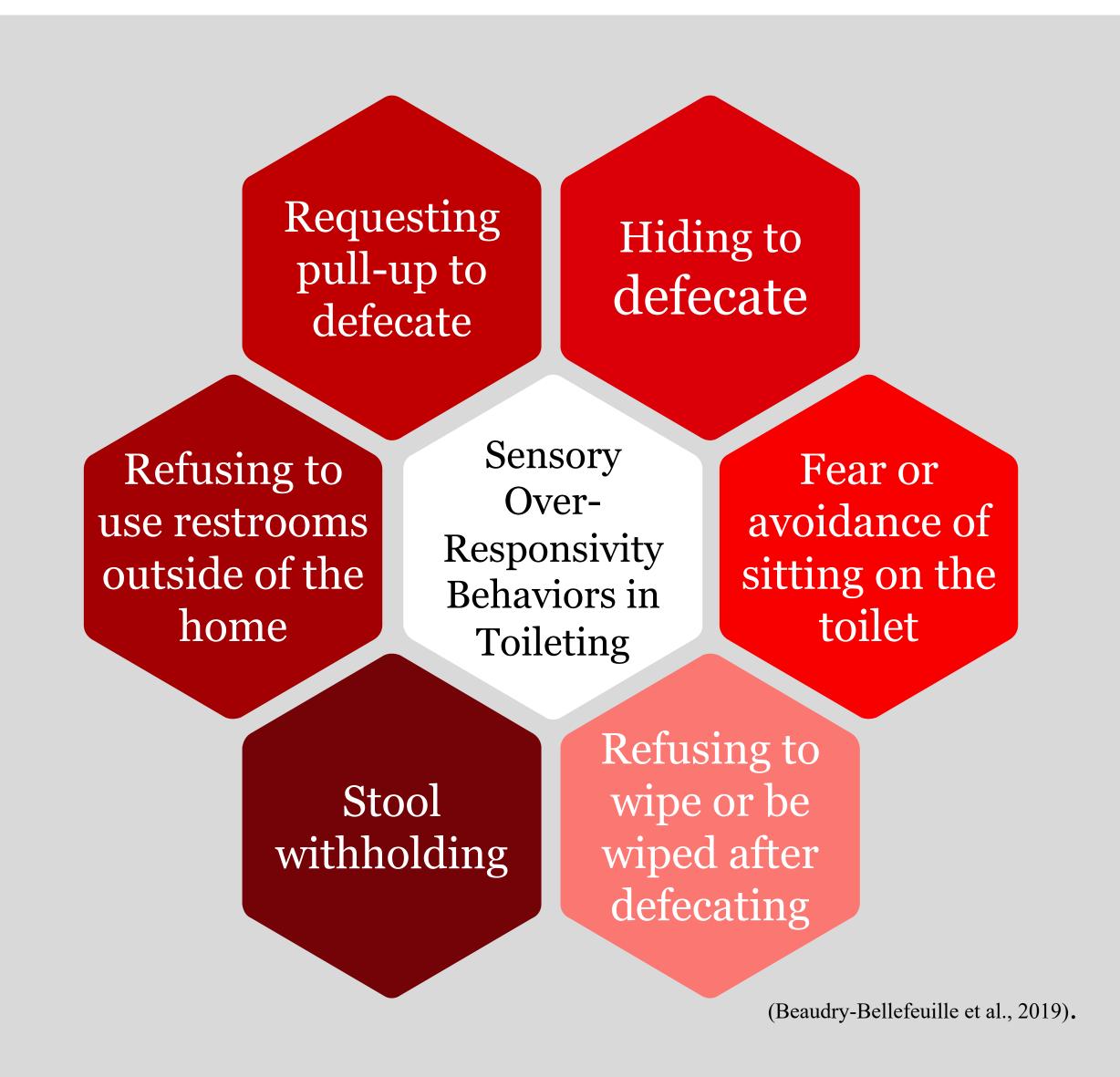
Bathrooms, Incontinence, & Withholding OH MY: Occupational Therapy's Role in Pediatric Constipation Management

Erin Buse, OTS; Faculty Advisor: Shana Cerny, OTD, MS, OTR/L, BCP

BACKGROUND & PURPOSE

- Functional constipation (FC), difficulty emptying one's bowels with no identifiable organic cause, comprises over 90% of pediatric constipation cases (Mousa, 2020). Retentive fecal incontinence, when soft stool is unintentionally excreted while a hard stool remains in the gastrointestinal system, is a common symptom of constipation (Beaudry-Bellefeuille & Lane, 2017).
- Evidence detailing the impact of sensory processing difficulties on participation in toileting tasks for children with chronic constipation is mounting; this includes noticing and understanding the urge to void, tolerating siting on the toilet, tolerating the sensation of voiding in the toilet, tolerating wiping, and recognizing accidents (Beaudry-Bellefeuille et al., 2019; Beaudry-Bellefeuille & Lane, 2017; Beaudry et al., 2013; Little et al., 2019).
- Occupational therapists are uniquely equipped to identify and address these sensory and contextual barriers to promote participation and independence in toileting tasks (AOTA, 2020; Beaudry-Bellefeuille et al., 2019; Litte et al., 2019). Occupational therapy's role in pediatric constipation and incontinence management is only emerging in recent years and therefore most occupational therapists are not equipped to serve in this advanced area of practice (Beaudry-Bellefeuille et al., 2019; Litte et al., 2019).

The purpose of this project was to gain advanced clinical experience in pediatric constipation and incontinence management.



THEORETICAL FOUNDATION

ECOLOGY OF HUMAN PERFORMANCE (EHP)

- ESTABLISH: tolerance of toileting through graded skill acquisition inside and outside of the bathroom, ability to notice and understand toileting urges, core strength (Dunn et al., 1994)
- ADAPT: using foot stool while on the toilet, using toilet insert, bringing toys into bathroom, down grading toilet sit task (i.e. sitting with pants on), utilization of toilet sit schedule (Dunn et al., 1994)
- PREVENT: education and activities addressing withholding behaviors (Dunn et al., 1994)

SENSORY INTEGRATION (SI)

- Presentation of sensory-rich experiences originated in play in a graded manner to challenge sensory integration skills promoting sensory modulation (Ayres, 1989; Beaudry-Bellefeuille et al., 2019; Parham et al. 2007; Schaff et al., 2018).
- Targeted experiences aimed to strengthen the child's ability to notice helpful body signals, connect signals to the body's needs, and reorganize their processing of sensory stimuli to promote tolerance toileting sensations (Ayres, 1989; Beaudry-Bellefeuille et al., 2019; Mahler, 2015; Parham et al. 2007)

METHODS

- CASE MANAGEMENT: Graded transition from observation to management of site mentor's constipation management evaluation and treatment caseload
- CONTINUING EDUCATION: Completion of evidence-based course on improving interoception (Mahler, n.d.)
- RESOURCE GUIDE: Compilation of created and collected quick information for covering therapists, handouts, developed interventions, and theory to practice paper

REFERENCES

American Occupational Therapy Association. (2020). Occupational therapy practice framework: Domain and process – fourth edition.

**American Journal of Occupational Therapy, 74. https://doi.org/10.5014/ajot.2020.7482001

**Description of the control of the control

Beaudry-Bellefeuille, I., Lane, S. J., & Lane, A. E. (2019). Sensory integration concerns in children with functional defecation disorders: A scoping review. *American Journal of Occupational Therapy, 73*. https://doi.org/10.5014/ajot.2019.030387
Beaudry-Bellefeuille, I. & Lane, S. J. (2017). Examining sensory overresponsiveness in preschool children with retentive fecal

incontinence. *American Journal of Occupational Therapy, 71*. https://doi.org/10.5014/ajot.2017.022707
Dunn, W., Brown, C., & McGuigan, A. (1994). The ecology of human performance: A framework for considering the effect of context. *American Journal of Occupational Therapy, 48*, 595-607.

Little, L. M., Benton, K., Manuel-Rubio, M., Saps, M., & Fishbein, M. (2019). Contribution of sensory processing to chronic constipation in preschool children. *Journal of Pediatrics*, 210, 141-145. http://doi.org/10.1016/j.jpeds.2019.03.020
Mahler, K. (n.d.) *Online course: 3 steps to improving interoception: An evidence-based approach*. https://www.kelly-mahler.com/product/three-steps-to-improving-interoception/

Mousa, H. M., Barsamian, J. M., Benitez, A. J., Webster, J. M., & Fiorino, K. M. (2020). Pediatric constipation: An epidemiologic and physiologic approach to guide a stepwise approach to its management. *Curr Treat Options Peds, 6,* 155-169. https://doi.org/10.1007/s40746-020-00199-z

Parham, L. D., Cohn, E. S., Spitzer, S., Koomar, J. A., Miller, L. J., Burke, J. P., Brett-Green, B., Mailloux, Z., May-Benson, T. A., Roley, S. S., Schaaf, R. C., Schoen, S. A., & Summers, C. A. (2007). Fidelity in sensory integration intervention research. *American Journal of Occupational Therapy, 61*, 216–227. https://doi.org/10.5014/ajot.61.2.216

RESULTS / CONCLUSIONS

- All objectives and deliverables were completed to standards of both site and faculty mentor demonstrating advanced level practice.
- Case study demonstrating occupational therapy's role in constipation and incontinence management, application of theoretical foundation, and example interventions was included in theory to practice paper.
- Occupational therapists are uniquely equipped to address performance deficits in toileting and toilet hygiene tasks due to skills in addressing sensory disturbances, adaptation of tasks to promote skill development, and scaffolding of skills to those of a greater complexity (AOTA, 2020; Beaudry-Bellefeuille et al., 2019).

IMPLICATIONS FOR OCCUPATIONAL THERAPY

- Utilization of the EHP model and SI frame of reference provided client-centered and holistic guidance throughout this experience.
- Emerging evidence detailing sensory components of toileting and common behaviors demonstrated by children struggling with chronic constipation resulting from sensory processing disturbance supports occupational therapist's role in this area or practice (Beaudry-Bellefeuille et al., 2019; Beaudry-Bellefeuille & Lane, 2017; Beaudry et al., 2013; Little et al., 2019).
- Due to evidence supporting improved interoceptive awareness and sensory processing with occupational therapy intervention, research evaluating the efficacy of occupational therapy intervention promoting independence and participation in toileting is warranted and recommended (Beaudry-Bellefeuille et al., 2019; Little et al., 2019; Mahler, 2015; Parham et al. 2007; Schaff et al., 2018).