

Background

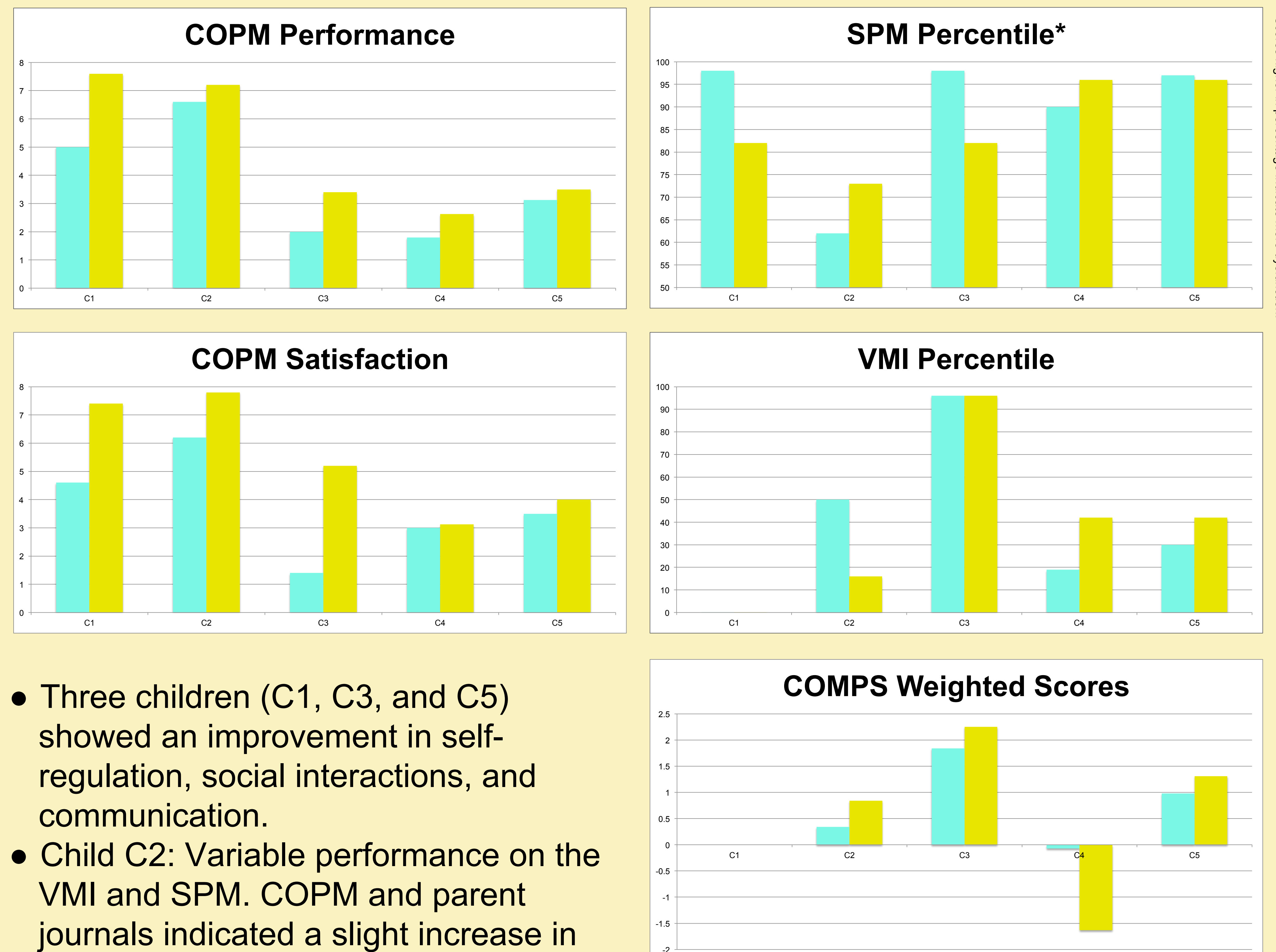
- Therapeutic Listening® (TL) is a sound-based intervention based on neurological principles (Frick & Young, 2009).
- Therapeutic Listening-Quickshifts (TL-Q) are 20 min sessions used as part of a sensory diet or with long-term intervention (Vital Links, 2015).
- Hall and Case-Smith (2007) found that children with sensory processing disorders demonstrated significant improvements in visual-motor skills, attention and sleep following use of a sensory diet and TL.
- Bazyk, et al. (2010) reported significant improvements in school performance in preschoolers with developmental disabilities using TL.
- Sheehy & Mandrussow (2015) found very little consistency in clinicians' documentation of TL-Q, suggesting a need for standardized assessment procedures.
- Horn, DeJong & Deutscher (2012) advocate for practice-based methods, which may be more apropos to capture change from highly individualized interventions than studies with stringent controls.
- Significant empirical evidence for the effectiveness of the TL-Q intervention is currently lacking.

“When listening to the music, he’s very calm, sweet, talks about how much he loves me. Seems to be a very relaxing time for him.” - Parent

Objective

Utilizing a practice- and case-based research method, the researchers intend to show how Therapeutic Listening® Quickshifts can improve function of ADLs, social interaction, school performance, sensorimotor skills, and self-regulation in children with sensory processing difficulties.

Results: Pre- and Post-test



- Three children (C1, C3, and C5) showed an improvement in self-regulation, social interactions, and communication.
- Child C2: Variable performance on the VMI and SPM. COPM and parent journals indicated a slight increase in social interaction.
- Child C4: Variable performance on the SPM, COMPS, and VMI. Parent journals indicated positive changes in social interaction and arousal.
- Overall, the COPM was the most sensitive assessment in detecting change.

References
Bazyk, S., Cimino, J., Hayes, K., Goodman, G., & Farrell, P. (2010). The use of therapeutic listening with preschoolers with developmental disabilities: A look at the outcomes. *Journal of Occupational Therapy, Schools, & Early Intervention*, 3(2), 124-138.
Frick, S. M., & Young, S. R., (2009). *Listening with the whole body: Clinical concepts and treatment guides for Therapeutic Listening®*. Madison, WI: Vital Links.
Hall, L., & Case-Smith, J. (2007). The effect of sound-based intervention on children with sensory processing disorders and visual-motor delays. *American Journal of Occupational Therapy*, 61(2), 209-215.
Horn, S. D., DeJong, G., & Deutscher, D. (2012). Practice-based evidence research in rehabilitation: an alternative to randomized controlled trials and traditional observational studies. *Archives of physical medicine and rehabilitation*, 93(8), S127-S137.
Sheehy, E. & Mandrussow, M., (2014). *Effect of Therapeutic Listening®: A Retrospective Data Analysis* (Unpublished master's thesis). Dominican University of California, San Rafael, CA.

Methods

- Pre-Test, Post-Test, Case Study Design
- 5 children, ages 4-14 with sensory processing needs
- Two sensory integration pediatric clinics in Madison, WI and Vancouver, WA.
- 8-week intervention; subjects listened to one music track for 20 minutes 2x a day for two weeks.
- Music selections were reviewed and changed every two weeks based on therapists' interpretations.
- Measures: Canadian Occupational Performance Measure (COPM), Sensory Processing Measure (SPM), Beery Buktenica Test of Visual Motor Integration (VMI), Clinical Observations of Motor & Postural Skills (COMPS), and qualitative parent journals.

Discussion

- Results of our study indicate changes in all ADLs, social interaction, school performance, sensorimotor skills and self-regulation domains.
- Changes were noted across all measures, though some measures were more sensitive to change than others (e.g., COPM).
- Changes were more evident through qualitative feedback and often reaffirmed through quantitative measures.
- Future studies may benefit from adopting a longer experimental period and more homogenous subjects (i.e. schedule and needs).
- Support of quantitative data through positive qualitative results reflects the concept of practice-based evidence as effective methodology.