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## Purpose

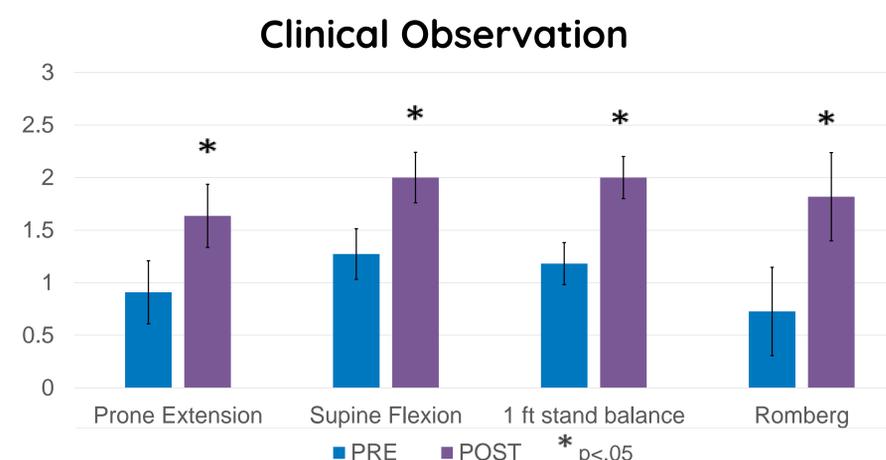
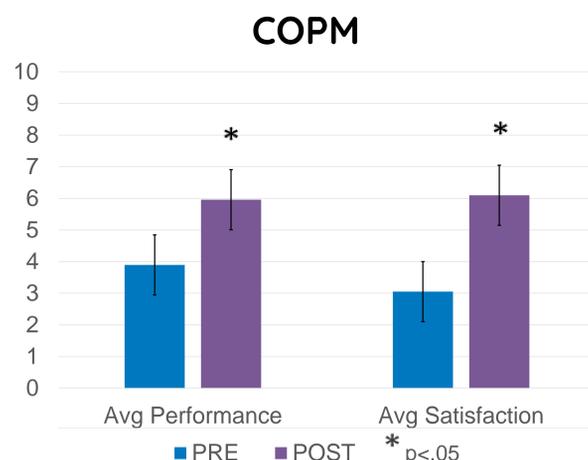
This study evaluates the effects of the Therapeutic Listening - Quickshifts (TL-Q) program and describes a standardized protocol for gathering data supporting TL-Q using a PBE\* approach.

## Therapeutic Listening

TL is a sound based intervention using electronically altered music used to improve self-regulation, sensory processing, attention, social skills and communication skills (Frick & Hacker, 2001). Quickshifts technique is a binaural beat technology which increases alpha brain waves to shift alertness and set up the nervous system for optimal learning (Vital Links, 2016).

## \*Practice Based Evidence

PBE can be used to document, measure, and review within standard clinical practice, thus providing high-quality evidence which can be generalized to larger populations as a basis for future practice (McDonald & Viehbeck, 2007).



## Parent Quotes

“Looked forward to TL and made him feel happier and calmer”

“Approaching children his own age and asks if they will be his friend”

“Tolerated hair cut... sat by himself. allowed to be caped, did not scream or hit or flinch. HUGE moment”

“Regulated frustration... cried briefly for a moment but slowed his breathing and moved on with a cheerful attitude”

## Method

Seven U.S. clinics identified 20 eligible participants: children aged 3-12 (one girl) receiving OT services for learning or developmental disabilities, demonstrating sensory integrative concerns or learning disabilities. Complete data was available for 10 children. Pre-test, post-test design; assessments included: →COPM, SPM, VMI, PDMS-2, BOT-2, and a modified Clinical Observation assessment. TL-Q protocol requires 30 minute intervals of listening twice a day for twelve weeks. Music was changed every two weeks or as needed determined by the therapist.

## Summary of Results

Significant improvement was seen in individualized goals (as measured by the COPM), posture, and sensory processing.

## Implication for OT

The results provide evidence to support the use of TL-Q in OT practice. The PBE framework was successful in capturing clinical changes. The COPM was a valuable tool for measuring outcomes, suggesting this measure should be used more frequently in practice.

## Acknowledgements

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