

Practice-based Evidence Approach to Studying the Effectiveness of Therapeutic Listening®

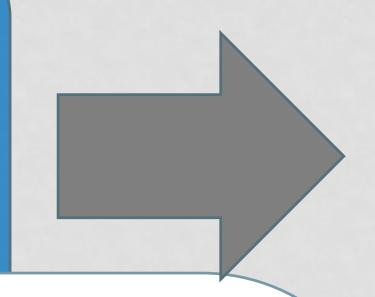


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Practice-based Evidence



- Practice-based evidence (PBE) examines the effectiveness of clinical practice within the actual clinical context PBE capitalizes on using customary procedures and measures to establish clinical outcomes. (Horn & Gassaway, 2010; Swisher, (2010).
- Therapeutic Listening® (TL) is frequently used as a complement to sensory integration intervention in children with sensory processing disorders. Over 15,000 clinicians have been trained in the use of Therapeutic Listening® worldwide.
- Research supporting the effectiveness of this widely used therapy is sparse (Bazyk, Cimino, Hayes, Goodman & Farrell, 2010, Hall & Case-Smith, 2006).



 Following a practice-based evidence approach under the guidance of expert OT clinicians, the effects of TL on children with sensory processing difficulties were measured commonly used assessments

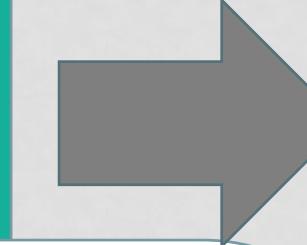
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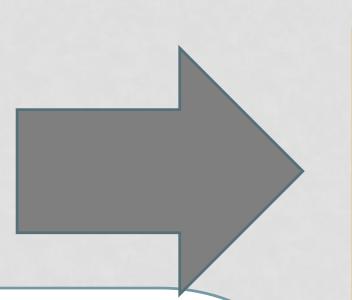
Phase 1 Retrospective Data Analysis¹



- Seven children 4 female, ages 4 years-4 months to 13 years-7months.
- **Two clinics** with expert OT clinicians. Intervention 6 to 20 months receiving TL as part of OT services.
- Qualitative and quantitative record review: test results from initial, progress and discharge evaluations, daily notes and record of TL intervention. Data triangulated by 3 researchers.
- Progress across domains (see table 1)
- Common assessment used sensitive to change (VMI, Sensory Processing Measure & Clinical Observations of Motor and Postural Skills)
- Need for consistent format goal setting and documentation of change

Table 1	Case #							
Skill	1	2	3	4	5	6	7	
Fine Motor Skills			0	+	+	+	0	
Gross Motor Skills			0	+	0	+	0	
Posture/Balance	+	+	+	+	+	+	0	
Bilateral Coord	+		0	+	0	+	0	
Oral Motor Skills	+						+	
Vis- Motor Integ.	+	0	+	+	+	+	0	
Sensory Mod.		+	+	+	+	+	+	
Sensory Discrim.	+/-	+	+	+	0		0	
Emotional Reg.	0	+	+			0	+	
Social Commun.	0	+		+	+	0	+	
Attn/Organize	+/-		+	+		+	+/-	

Phase 2 Prospective Case Study Pilot



- Five children, 3 female, ages 5, years-0 months to 10 years-3 months
- Same two clinics as phase 1: 8 weeks TL Quickshifts twice daily for 15-20 minutes plus OT intervention as usual.
- Standardized Pre and Post test measures:
 Canadian Occupational Performance
 Measure (COPM), Sensory Processing
 Measure (SPM), Clinical Observations of
 Motor and Postural Skills (COMPS),
 Beery-Buktenica Developmental Test of
 Visual Motor Integration (VMI), and
 therapist treatment notes & parent
 journals
- Overall progress made in each domain (see table 2)
- COPM and parent journals best documented change (positive and negative). Other assessments had mixed results.

Table 2	Case							
Skill	1	2	3	4	5			
Self-Regulation and Arousal	+	N/A	+	+	+			
ADLs	+	+	+	N/A	+			
Social Interaction	+	+	+	+	+			
Sensorimotor Skills	+	+	+/-	+/-	+			

Note: + = skills improved; o = no change; - = skills declined; +/- = skills fluctuated; blank N/A= not applicable

Phase 3 Multi-center, Multiple Case Study

- Children with learning and/or developmental issues, 3 to 12 years of age
- Seven clinics: Expert OT clinicians
- 12 weeks intervention with TL Quickshift with OT
- Standardized Pre and Post test assessments
- COPM (adapted to measure Social emotional, self-regulation, communication, Activities of Daily Living, Play, Productivity & family life (chores, contributing to family, etc), and sensory and motor skills based on family priorities, Sensory Processing Measure, Clinical Observations of Quality of Movement, Beery-Buktenica Test of Visual Motor Integration (Beery-VMI), Motor Assessment: Peabody -2 or BOT-2
- Therapist and Parent Qualitative Data: TL
 Parent Log & TL-Q Progress Sheet

Implications for OT Practice

- Practice-based evidence (PBE) extracts evidence from practice itself and how it is customarily provided. (Horn, DeJong, & Deutscher, 2012)
- Clinicians can reliably measure outcomes of interventions in a clinical context using a PBE approach.

The methodology used can provide an important means of gathering clinical evidence.