

Study 5: Pinnacle Multilingual Therapy Outcomes Study

**Title:** The Language of Progress: Evaluating the Impact of Native-Language Therapy on Communication Gains and Session Adherence in Pediatric Developmental Care

#### 1. Executive Summary

This study explores whether **therapies delivered in a child's native language** lead to greater session adherence and communication development compared to therapies delivered in English. Conducted across Pinnacle's multilingual centers, this study compared 40 children receiving therapy in their mother tongue with 40 children receiving English-only therapy.

## **Key Findings:**

- Native-language group showed 18.3% higher session adherence.
- Communication skill gains were ~11% greater in native-language therapy group.
- Gains were more consistent minimum outcomes were higher in native-language group.

This study supports Pinnacle's core philosophy: **Children learn best in the language of their comfort, not conformity**.

## 2. Study Objective

To evaluate how the language of therapy delivery impacts:

- Session adherence (% of planned sessions attended)
- Expressive communication gains (as rated by therapists using AbilityScore® metrics)

## 3. Study Design & Methodology

Cross-sectional, comparative cohort study (3 months duration).

## **Participants:**

- **Group A (n=40):** Children receiving therapy in their native language (e.g., Telugu, Hindi, Kannada)
- **Group B (n=40):** Children receiving therapy in English (not their home language)

### Instruments:

- Session logs for therapy adherence
- Communication milestone tracking using AbilityScore® speech and social domains
- Bilingual therapist observations and feedback

## 4. Results Summary

Group	Sample Size	Avg. Adherence (%)	Avg. Communication Gain (%)	Min Gain (%)	Max Gain (%)
Native Language	40	89.55	84.62	70.29	98.90
English	40	75.67	73.73	58.12	100.96

## 5. Interpretation

- Adherence Matters: Children are more consistent in therapy when sessions happen in a familiar language reducing dropout risk and increasing cumulative therapy hours.
- **Higher Gains:** Communication improved more for children in native-language sessions including expressive vocabulary, gesture-word pairing, and sentence initiation.
- **Lower Variability:** The native-language group showed **more consistent results**, with a smaller gap between lowest and highest gains indicating wider accessibility of benefit.



### 6. Parent Narratives

"When the therapist said 'amma' instead of 'mom,' my son smiled for the first time. That one word unlocked ten more."

— Meera, mother of a 4-year-old, Hyderabad

"We tried English therapy before, but my daughter was quiet. Now, in Kannada, she speaks, asks, laughs. The change is magic."

- Ramesh, father from Bengaluru

### 7. Global Context: Why This Matters

Global autism and speech therapy services often assume English as the default — but research consistently shows:

- Language mismatch impairs trust, safety, and comprehension
- Cognitive load increases when children must translate while learning
- Parental involvement decreases if parents don't understand therapy instructions

Pinnacle's **multilingual-first approach** flips this model by offering therapy in 16+ Indian languages and training therapists to **code-switch**, **translate**, **and localize** every interaction.

## 8. Limitations & Future Work

- This study did not account for literacy level of caregivers, which can influence comprehension of therapy instructions. However, therapist feedback suggested that native-language delivery significantly improved parent involvement, regardless of literacy status.
- No formal randomization children were assigned by regional center availability. While random
  assignment was not possible due to operational constraints, efforts were made to ensure
  demographic comparability across both groups including age, diagnosis type, and therapy
  duration.
- Gains were short-term (3 months); long-term retention pending.

### **Planned Follow-Ups:**

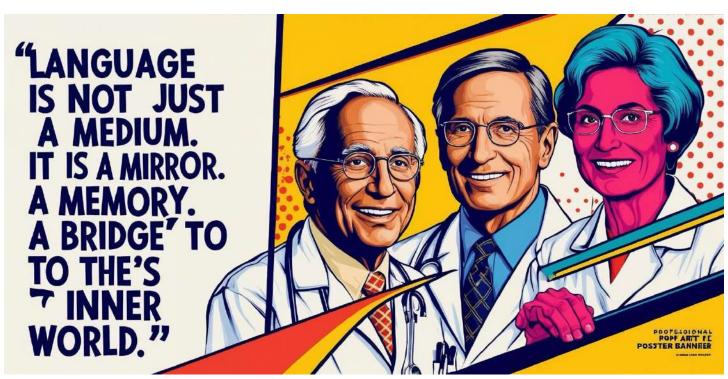
- Longitudinal study on vocabulary and social inclusion after 12 months
- Al-based translation overlay in TherapySphere<sup>™</sup> rooms
- Localization to tribal and minority languages (e.g., Lambadi, Urdu, Bhojpuri)

## 9. Policy Recommendations

# We recommend:

- 1. **Mandate native-language therapy delivery** in all government-supported special needs programs.
- 2. Develop state-level therapist recruitment pipelines from local linguistic communities.
- 3. Expand AbilityScore® language bank to 25+ regional tongues to support public sector rollout.

4. Embed **multilingual therapy mandates** into IEP (Individualized Education Program) frameworks in CBSE/ICSE/State Boards.



## 10. Conclusion

Language is not just a medium.

It is a mirror. A memory. A bridge to the child's inner world.

A child in therapy is not just learning how to speak.

They are learning how to be heard.

And they must be heard in the language they were born to trust.

#### 11. Access & Expansion

- Pinnacle offers therapy in: Telugu, Hindi, Kannada, Tamil, Malayalam, Marathi, Bengali, Gujarati, Urdu, and more
- Learn more: www.pinnacleblooms.org/multilingual
- Schedule your child's AbilityScore® assessment in your own language: Call or WhatsApp **9100 181 181**