



Study 3: TherapeuticAI® Effectiveness Study

Title: *AI with Empathy: Evaluating the Impact of TherapeuticAI® on Therapist Performance, Goal Achievement, and Planning Efficiency in Integrated Autism Care*

1. Executive Summary

This study investigates the impact of **TherapeuticAI®**, Pinnacle’s patented AI engine, on therapist performance and therapy quality across 100 practitioners. Developed to support real-time decision-making, meltdown prediction, and therapy planning, TherapeuticAI® is a core pillar of Pinnacle’s PGAF framework.

Key Findings:

- **Goal completion rates increased by 7% with AI support.**
- **Meltdown prediction accuracy improved by 15 percentage points.**
- **Planning time per session was reduced by over 36%,** boosting therapist bandwidth and reducing cognitive load.

These findings confirm that **TherapeuticAI® augments human judgment with scalable precision** — delivering both speed and sensitivity in pediatric therapy.

2. Study Objective

To evaluate how AI support via **TherapeuticAI®** impacts:

- Therapy goal achievement (% of ITP goals met per child)
- Accuracy of meltdown prediction

- Therapist time spent on session planning

3. Study Design & Methodology

Design:

Controlled, comparative performance analysis of 100 certified therapists over a 3-month period.

Groups:

- **Group A (n=50):** Therapists using TherapeuticAI® (AI-assisted)
- **Group B (n=50):** Therapists without AI support (manual planning)

Metrics Tracked:

- **Goal Completion (%):** % of therapy goals achieved on schedule.
- **Meltdown Prediction Accuracy (%):** Proportion of correctly predicted behavioral escalations.
- **Session Planning Time (min):** Avg. minutes taken to prepare each individualized therapy plan.

Instruments Used:

- Pinnacle’s internal therapy management system with built-in AI modules
- Therapist feedback forms and timestamped planning logs
- Session audit and supervisor validation checks

4. Results Summary

Group	Sample Size	Goal Completion (%)	Meltdown Prediction Accuracy (%)	Avg. Planning Time (min)
With TherapeuticAI	50	88.82%	90.81%	4.68 minutes
Without AI	50	81.91%	75.40%	7.28 minutes

5. Interpretation

- **Precision and Speed:** Therapists using TherapeuticAI® achieved more goals, predicted behaviors more accurately, and prepared faster.
- **Cognitive Load Reduction:** The 2.6-minute average time saved per session reduces fatigue and allows therapists to support more children.
- **Decision Intelligence:** AI integration provides behavior history, triggers, session notes, and visual indicators in real time — enabling better preparation and dynamic adaptation.

- **Standardization Without Sterility:** Despite AI involvement, therapy plans retained therapist-led emotional nuance — affirming that the tool augments, not replaces, the human element.



6. Therapist Testimonial Quotes

“I spend less time guessing and more time connecting. The AI reminds me of past meltdowns, patterns I missed, and gives clarity during plan writing.”

— **Nayana, Senior Occupational Therapist, Bengaluru**

“Planning used to take 10–12 minutes per child. Now, it’s under 5 — with better accuracy. I have more energy left for actual sessions.”

— **Vikram, ABA Therapist, Hyderabad**

“TherapeuticAI® doesn’t just crunch numbers. It predicts moods, triggers, and flags fatigue — things even experienced therapists can miss.”

— **Shweta, Speech-Language Pathologist, Delhi**

7. Global Context: Literature Review

While several global efforts have integrated AI into diagnostics (e.g., eye-tracking, EEG, speech patterning), very few have addressed **therapist planning or behavioral prediction** in day-to-day sessions.

TherapeuticAI® is globally unique in that it:

- Supports **real-time session planning**
- Offers **meltdown forecasting based on session context**

- Enhances human therapists rather than replacing them
- Operates in **low-bandwidth environments**
- Is trained on 19M+ therapy session data across India

This positions it ahead of peer systems like Cognoa (US), BrainLeap (Canada), and NHS-piloted models that focus mainly on assessment or early signs.

8. AI Ethics, Explainability & Data Safety

Pinnacle’s TherapeuticAI® is built on **ethically aligned design**, with clear safeguards:

Principle	Implementation
Explainability	Every suggestion (e.g., score trend or meltdown risk) is shown alongside data rationale.
Human-in-the-Loop	AI supports, but never overrides therapist input. Plans are editable, AI flags are optional.
Data Privacy	Compliant with India’s DPDP Bill, GDPR, and HIPAA. No biometric data stored.
Therapist Consent	All therapists undergo AI ethics training and sign opt-in use agreements.

TherapeuticAI® is an **empathy engine**, not a surveillance tool — its purpose is to restore therapist focus and prevent burnout while enhancing accuracy.

9. Limitations & Future Scope

- This study was conducted over 3 months; longer-term outcomes such as sustained progress or burnout reduction require further research.
- Data was collected across Tier 1 and Tier 2 cities only — rural deployment performance pending.
- Currently trained on pediatric therapy sessions only; adult adaptation in pipeline.

Future expansions:

- Voice-integrated planning interface (speak-to-plan)
- Visual anomaly detection in session recordings
- Auto-adjusted therapy loops based on mid-session micro-signals

10. Policy & Public Sector Recommendations

Given the efficiency gains and accuracy enhancement, we recommend:

1. **TherapeuticAI® be adopted as the official AI companion in government pediatric therapy programs.**

2. WHO and UNICEF engage with Pinnacle to pilot **AI-augmented child therapy** frameworks in low-resource settings.
3. Government skill development missions integrate **AI+Therapist training programs** based on Pinnacle’s model.
4. Insurance boards recognize **AI-supported goal achievement** as valid indicators of progress and therapy quality.

11. Conclusion

TherapeuticAI® is **not a replacement** for human connection. It is a multiplier. It frees time. It adds confidence. It turns data into direction. And most importantly — it gives children and therapists a shared path toward clarity, confidence, and consistency.

It is not artificial intelligence replacing therapy. It is therapeutic intelligence restoring it.

12. Learn More / Request Integration

- TherapeuticAI® is proprietary to Pinnacle Blooms Network
- Global pilot partners welcome: [Request Pilot](#)
- Full platform demo available via WhatsApp at 9100 181 181
- Custom integration offered to:
 - Government health programs
 - School systems
 - Therapy center chains
 - Pediatric hospitals

