

Project ImPACT: A Look at Parent-Mediated Autism Spectrum Disorder (ASD) Intervention



Milana Korobko, COL 2024

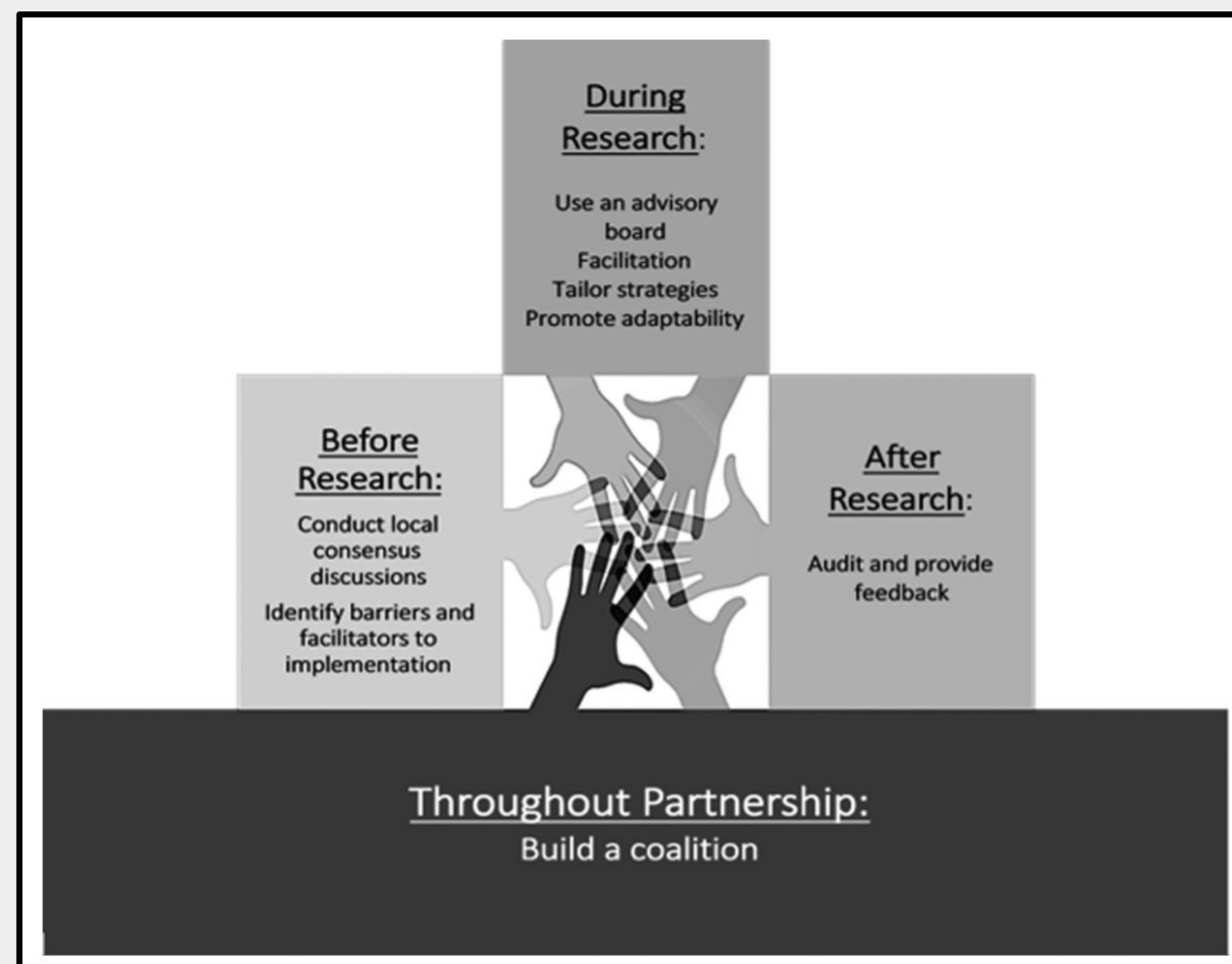
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Background

- Despite the proliferation of evidence-based practices for ASD, treatment remains underused and poorly implemented in community settings.
- Studies on early intervention locate parent-mediated interventions as sources of great improvements in cognitive ability, social functioning, behavior, and adaptive skills for children with ASD.
- Project ImPACT is a naturalistic, developmental, behavioral intervention for children with autism spectrum disorder, developed to deliver an accessible and adapted evidence-based, parent-coaching intervention into the community.

Implementing evidence-based practices in the community



Conceptual model illustrating implementation strategies across phases of the CAP research process

Naturalistic Developmental Behavioral Interventions

NDBIs are interventions delivered in naturalistic and interactive social contexts, derived from the principles of behavioral learning and developmental sciences.

Provider

ImPACT

Parent Empowerment and Coaching in Early Intervention (PEACE)

- A checklist of provider use of caregiver coaching: General, Collaboration, Daily Routines, Demonstration, In-Vivo Feedback, and Reflection and Problem Solving.

PILOT TEST: Caregiver Coaching Fidelity Form					
When there was an opportunity, did the provider:	Always	Frequently	Sometimes	Rarely	Never
General					
1. Check in with caregiver about any issues since last session.	5	-	-	-	1
2. Set the plan for today's session with caregiver.	5	-	-	-	1
3. Arrange aspects of the environment to promote parent-child interaction.	5	4	3	2	1
4. Maintain a position that would not interfere with the parent-child interaction.	5	4	3	2	1
5. Interact with the child and the caregiver together as a dyad rather than separately.	5	4	3	2	1
Collaboration					
6. Let caregivers make some decisions and lead parts of the intervention session.	5	4	3	2	1
7. Use and expand caregiver ideas during session.	5	4	3	2	1
8. The coach and caregiver collaboratively set goals for child.	5	4	3	2	1
9. Ask for caregiver input or make feedback on what is observed.	5	4	3	2	1
Daily Routines					
10. Explain caregiver and child activities that are related to their usual daily routines.	5	4	3	2	1
11. Explain how embedding strategies in daily routines helps child development.	5	4	3	2	1
12. Connect skills being learned in session to other future routines.	5	4	3	2	1
13. Suggest activities to do with the child while and outside the intervention session.	5	4	3	2	1

Parent

Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO)

- A checklist of parent behaviors in four domains: Affection, Responsiveness, Encouragement, and Teaching.
- Emphasizes positive parenting interactions as a way to promote children's early development.
- Measures the program outcome to ensure program quality over time.

Increased Provider Use of Caregiver Coaching

Improved Caregiver Use of Intervention Strategies

Improved Children's Social-Communication Skills

Conceptual Model for Mechanisms of Change

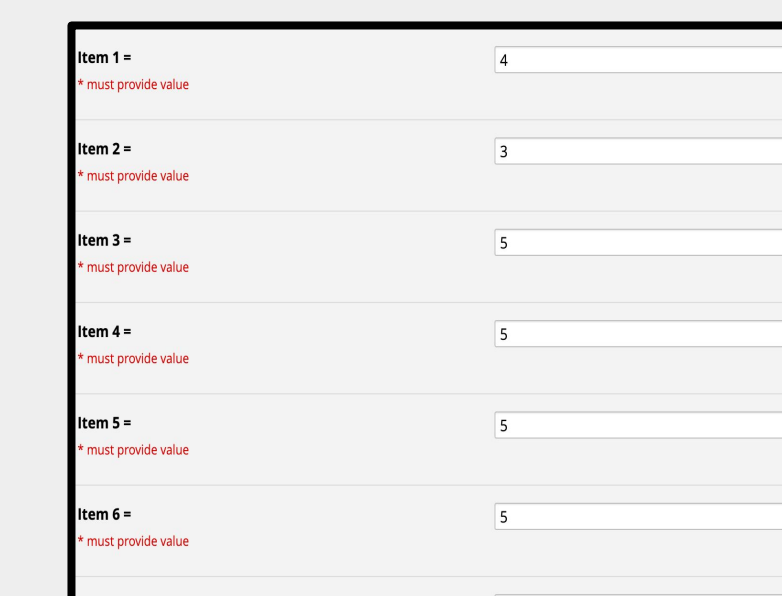
Child

Keep Calm

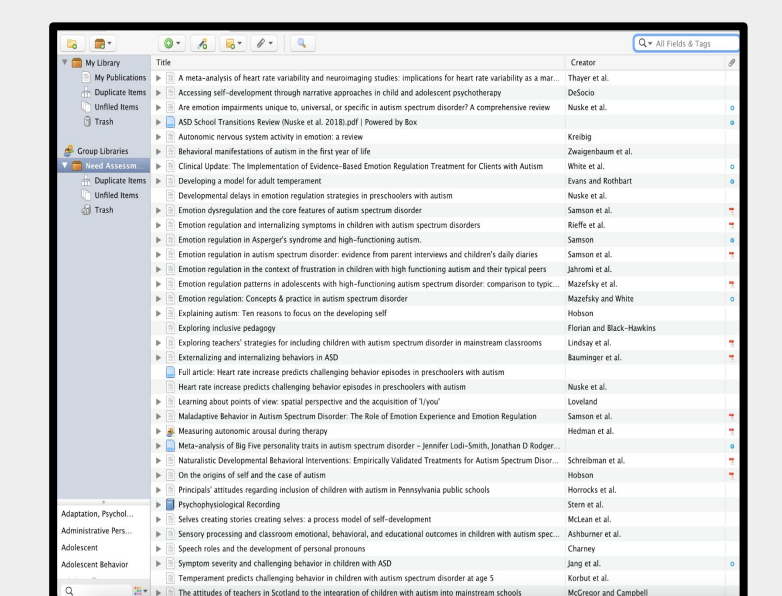
- An interactive data collection tool for supporting emotion regulation in students.
- Integrates wearable heart rate tracking to identify and alert teachers of students' intensified stress levels and remind them of evidence-based strategies that can lessen stress and prevent challenging behaviors.
- Keep Calm's evidence-based strategies often corresponded with those of Project ImPACT:
 - Modeling
 - Feedback
 - Role Play and Practice



Data management

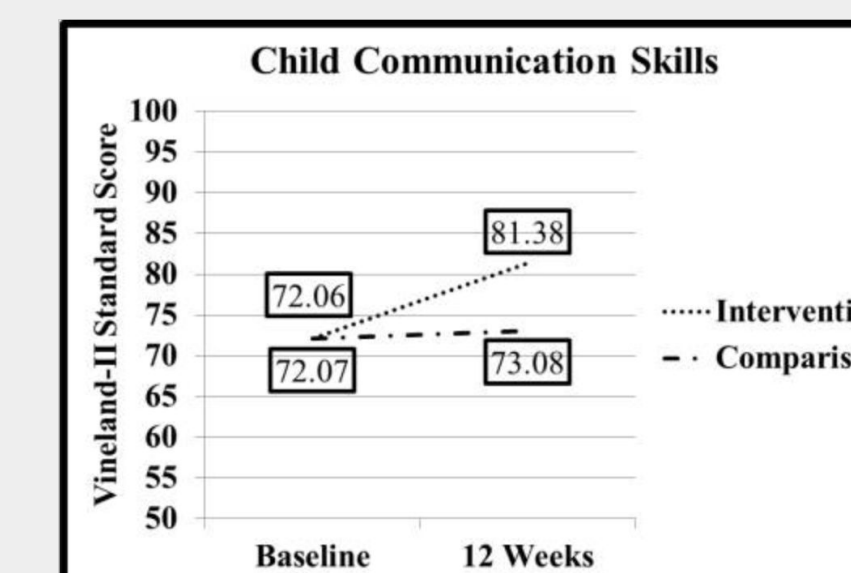


REDCap

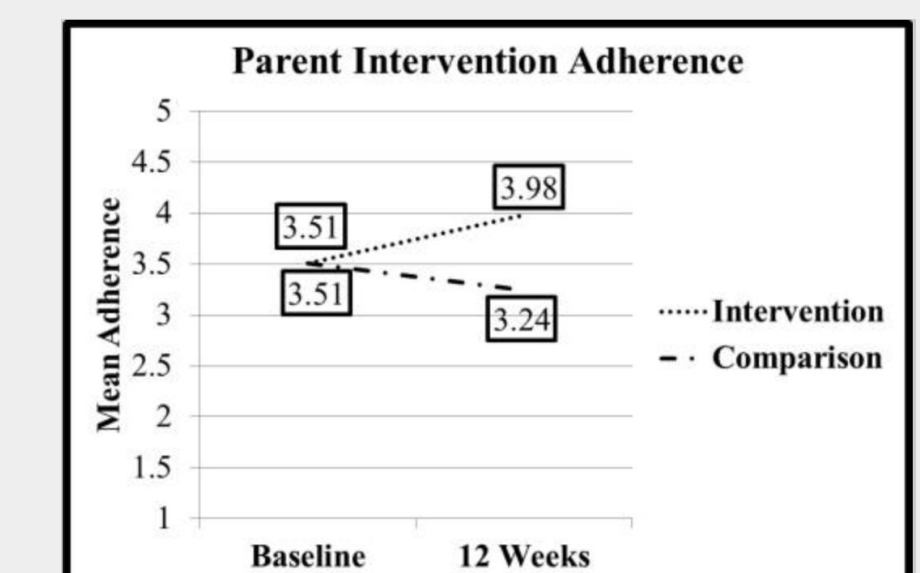


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Outcomes



Data displayed are standard scores from the Vineland-II (Sparrow, Cicchetti, & Balla, 2005).



Data displayed are the mean of the six summary intervention component scores on which parents were rated.

References:

Pellecchia, Melanie et al. "Community-academic partnerships in implementation research." Journal of community psychology vol. 46,7 (2018): 941-952. doi:10.1002/jcop.21981
 Pellecchia, M., Beidas, R.S., Mandell, D.S. et al. Parent empowerment and coaching in early intervention: study protocol for a feasibility study. Pilot Feasibility Stud 6, 22 (2020).
<https://doi.org/10.1186/s40814-020-00568-3>