

# The Effects of a Culturally Adapted Early Communication Intervention for Spanish Speaking Families



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## Background

There are few interventions for Spanish-English emergent bilinguals who have language delays (Durán et al., 2016; Guiberson & Ferris, 2019). When the home language is supported, children benefit in their cognitive, cultural, and social skills. *EMT en Español* is a caregiver-implemented communication intervention that has been adapted for, and validated by, Spanish-speaking families in the US (Peredo et al., 2018). The purpose of this RCT was to examine the effects of teaching caregivers to implement *EMT en Español*. Secondary analyses included child language outcomes and social validity of the intervention package.

## Research Questions

1. Do caregivers in the intervention group demonstrate more *EMT en Español* strategies than caregivers in the control group?
2. Do children in the intervention group show higher expressive and receptive vocabulary after the *EMT en Español* intervention than children in the control group?
3. Do caregivers in the intervention group find *EMT en Español* to be a culturally valid intervention?

## Method

Twenty-one caregiver-child dyads from low-income households were randomized to the intervention or waitlist-control group. Children were eligible if they were between the ages of 30-42 months, had a language delay, and did not have an additional diagnosis. Bilingual therapists taught caregivers in the intervention group *EMT en Español* strategies using the Teach-Model-Coach-Review (TMCR; Roberts et al., 2014) approach. All intervention was conducted in the home in play, book, and everyday home routines.

## Participants

Variable	Intervention N	Intervention %	Control N	Control %
Child Sex				
Male	6	60	5	50
Female	4	40	5	50
Receiving EI (Part C) Services				
Yes	9	90	8	80
No	1	10	2	20
Caregiver Education Level				
Less than high school	7	70	6	60
Completed high school	3	30	2	20
Above high school	0	0	2	20
Caregiver Country of Origin				
Mexico	7	70	5	50
U.S. (Puerto Rico)	1	10	0	0
Honduras	1	10	2	20
El Salvador	1	10	1	10
Peru	0	0	1	10
Dominican Republic	0	0	1	10

## Assessments

Assessments were administered to participants in both groups at three timepoints: pre-intervention period, post-intervention period, and a 3-month follow-up.

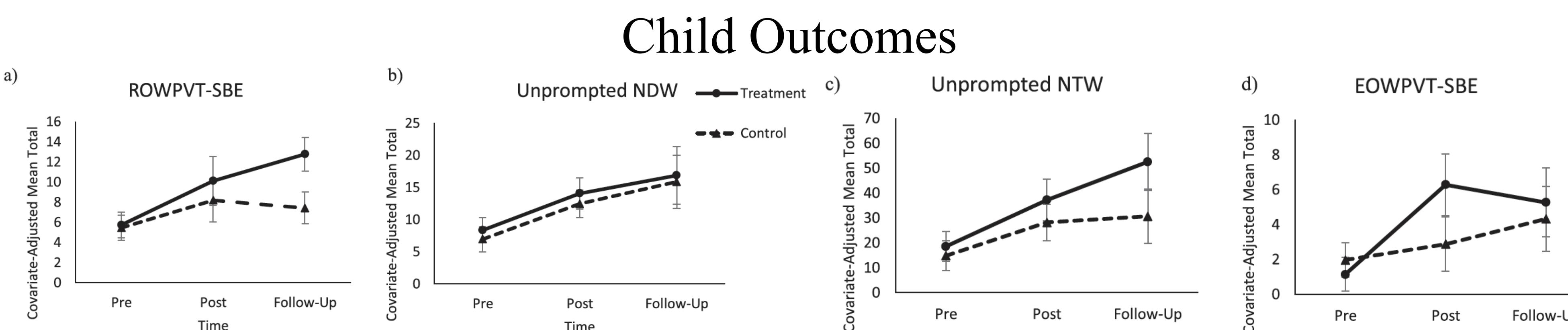
Variable	Measure and Description
Caregiver Use of EMT en Español Strategies	Coded from a 15-min video recorded naturalistic play sample between the caregiver and child with a standardized set of toys and books (CCX)
Child Spontaneous Use of Words	Child's number of unprompted words during the 15-min caregiver-child interaction with a standardized set of toys and books
Bilingual Receptive Language	Standardized measure: Receptive One Word Picture Vocabulary Test-4 Spanish-Bilingual Edition (Martin, 2012)
Bilingual Expressive Language	Standardized measure: Expressive One Word Picture Vocabulary Test-4 Spanish-Bilingual Edition (Martin, 2011)

## Results

### Caregiver Outcomes

Pre	Post			Follow-up		
	Intervention M (SD)	Wait-list Control M (SD)	t	Intervention M (SD)	Wait-list Control M (SD)	t
% Matched turns	.31 (.10)	.27 (.19)	0.64	.45 (.11)	.28 (.13)	2.91*
% Expansions	.12 (.18)	.13 (.15)	-0.11	.25 (.15)	.09 (.09)	2.70*
% Child Targets	.18 (.11)	.15 (.07)	0.91	.46 (.23)	.14 (.07)	3.84**
% Responsiveness	1.00 (.00)	1.00 (.02)	1.00	.96 (.07)	1.00 (.00)	-1.44
						d
				.41 (.19)	.31 (.16)	1.39
				.32 (.29)	.09 (.10)	1.24
				.40 (.20)	.14 (.04)	1.90
				.98 (.03)	1.00 (.00)	-0.81
						1.00
						-1.23
						-0.94

\*p<0.05, \*\*p < 0.01, \*\*\*p < 0.001



### Child Outcomes

Caregivers increased and maintained their language support strategies (target talk and expansions), and children showed improvement in their overall receptive and expressive communication. Results from the social validity measure were positive, but these results also led to adapting the intervention to be more culturally congruent (e.g., removing the strategy "avoid providing directions" to the child). For populations who are underrepresented in research and who have often been overlooked in practice, access to high quality interventions such as *EMT en Español* are a promising step towards equity. Future research should focus on child outcomes, longer-term outcomes, and other child populations (e.g., autism).

### References

Peredo, T. N., Mancilla-Martinez, J., Durkin, K., & Kaiser, A. P. (2022). Teaching Spanish-speaking caregivers to implement EMT en Español: a small randomized trial. *Early Childhood Research Quarterly*, 58, 208–219.

Findings also presented at 2022 ASHA Convention.

Peredo, T. N., Mancilla-Martinez, J., Durkin, K., & Kaiser, A. P. (2022, November). Effectiveness of caregiver-implemented EMT en Español: Results of a small randomized trial. Virtual presentation at the American Speech-Language Hearing (ASHA) Conference, New Orleans, LA.