

Evaluating the Effects of a Parent-Implemented Picture Exchange Intervention on a Child with Autism Via Telehealth

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BACKGROUND

Functional Communication Training (FCT) is a widely used Evidence-Based Practice to teach children how to effectively communicate their wants and needs while reducing challenging behavior (Hollo & Burt, 2018; Wong et al., 2015). Picture exchange is an augmentative/alternative communication intervention that is frequently utilized for individuals to communicate with others through picture cards (Ganz, 2014). Providing parents with FCT training via telehealth is effective for children with autism (Wacker, 2013).

METHODS

Participants:

- Child: 5-year-old Black male diagnosed with autism
- Parent: Mother

Setting:

- Telehealth- Zoom platform

Materials:

- Known preferred and distractor items/ activities
- Picture cards of preferred and distractor items
- Communication book
- Wireless headphones
- Reliable internet connection
- Bluetooth technology
- Personal device (i.e., iPad, computer, phone) to connect to sessions

Independent Variable:

- Parent-Implemented Intervention to teach FCT through a Picture Exchange Intervention

Dependent Variables:

- Parent's independent use of steps for FCT intervention (i.e., Picture Exchange Intervention)
- Parent's report of social validity (i.e., acceptability) of intervention
- Child's independent accuracy of responding using a functional communication response (i.e., Picture Exchange Intervention)
- Child's frequency of challenging behavior (i.e., aggression, self-injurious behavior (SIB)) throughout session

Interobserver Agreement (IOA):

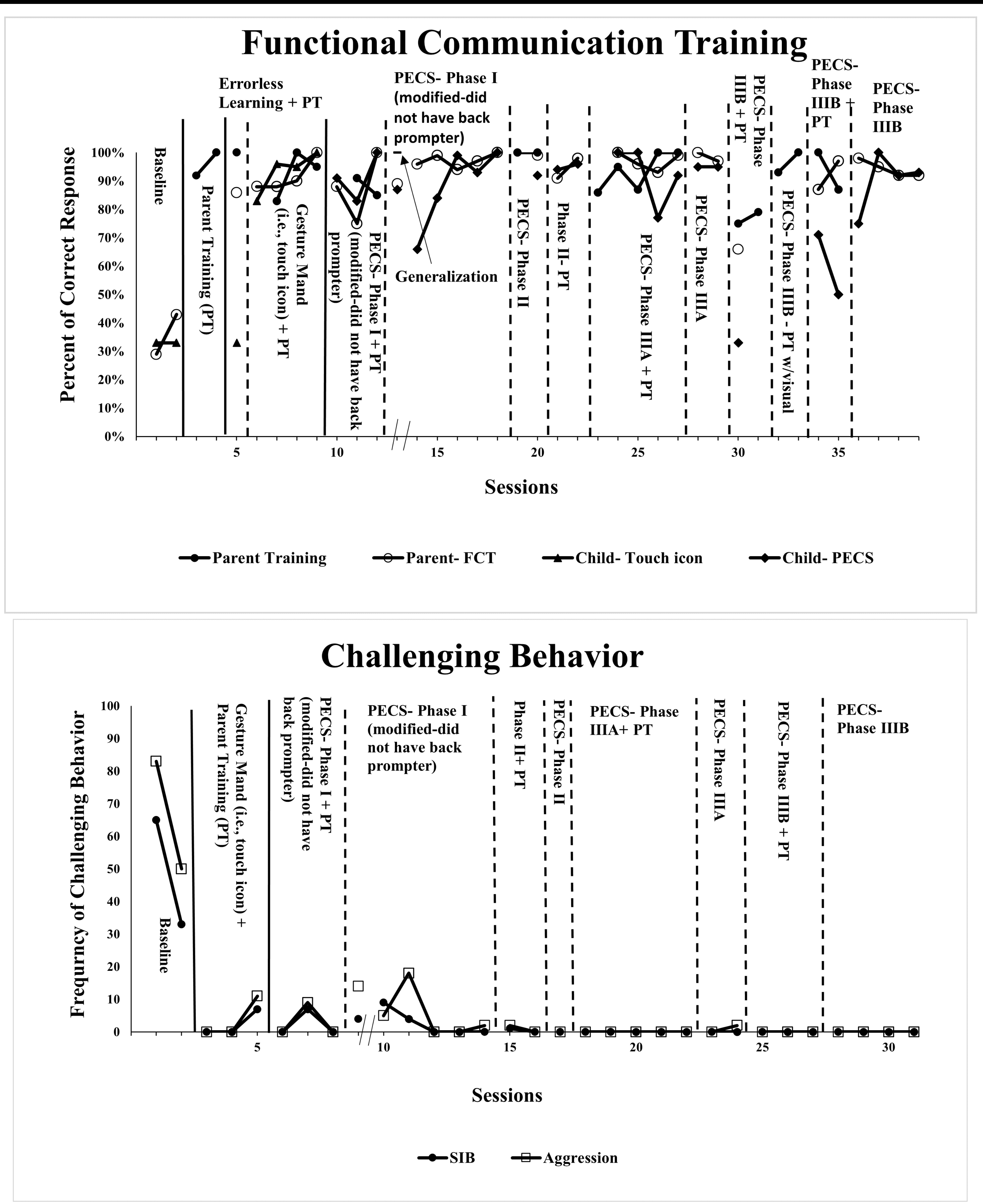
- IOA was collected for 31% of sessions
 - Parent Data: Average of 94% agreement, ranging from 81%-100%
 - Child Data: Averaged of 92% agreement, ranging from 75%-100%

RESULTS

Parent:

- Baseline: Parent independently implemented FCT intervention an average of 36% opportunities
- Intervention: Parent independently implemented all intervention phases (i.e., gesture mand, picture exchange phase I, PECS phase II, PECS phase III A, PECS phase III B, parent training sessions across all phases) 90% of opportunities across at least 3 consecutive sessions

Utilizing Parent-Implemented Intervention to teach FCT through a picture exchange intervention can be effective via telehealth for children who have high magnitude challenging behavior and limited language. This intervention can also be beneficial for families who have limited resources or access to services in their area.



RESULTS (CONT.)

Child:

- Baseline: Child functionally requested for reinforcement an average of 33% of opportunities
- Intervention:
 - Child independently requested his wants and needs during all phases of functional communication (i.e., gesture mand, picture exchange phase I, PECS phase II, PECS phase III A, PECS phase III B) 90% of opportunities across at least 3 consecutive sessions
 - Child engaged in 0 instances of challenging behavior across 16 consecutive sessions

Social Validity:

- Parent expressed high acceptability in treatment regarding the benefits and effectiveness of the intervention phases

How relevant are the target goals to your concerns?				
Not at all relevant	1	2	3	4 5 Most relevant
How do you feel (client name) is progressing on the targets?				
No significant progress has been made	1	2	3	4 5 Significant progress has been made
How easy do you feel the parent steps are to implement?				
Extremely Difficult	1	2	3	4 5 Extremely Easy

LIMITATIONS

- Back prompter was not utilized during picture exchange intervention due to availability of parents/ caregivers
- Minimal data points during initial phase changes
- Post intervention social validity was not accessed due to lack of parent communication
- Technological difficulties and limited availability for in vivo modeling
- Lack of generalization/ maintenance data due to scheduling

FUTURE RESEARCH

- Replicating this study to multiple participants with similar communication deficits and/or challenging behavior via telehealth