Using Pyramidal Training to Coach Educators on Reinforcement-Based Interventions to Decrease Student Challenging Behavior

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Abstract

Challenging behavior exhibited by students in the school setting are one of the most significant obstructions to students learning (Bondy et al. 2010). These behaviors often warrant specialized interventions delivered by educators in the presence of typically developing peers; however, availability of personnel to prepare educators to implement said interventions is limited (Oram et al., 2016). One viable solution may be to leverage a pyramidal training model (Andzik & Schaefer, 2020). In the current study, one expert trainer utilized pyramidal training to prepare four educators on implementing functional communication training without extinction. The purpose of the study was to decrease aggression toward peers for one student in an inclusionary early childhood education setting. With written instruction only (similar to what a teacher might receive as part of a behavior intervention plan), all educators implemented in the intervention with low fidelity (*M*= 15% steps completed correctly). Post-intervention, all educators were able to implement the intervention with the trainer at or above 80% fidelity, and skills improved to 100% fidelity during in-situ training with the student. For the student, aggression toward peers

was reduced to 0% of intervals and independent communication responses increased to 100% of intervals.

Results

Figure 1

Results of Multiple Baseline across Educators implementing FCT w/out EXT

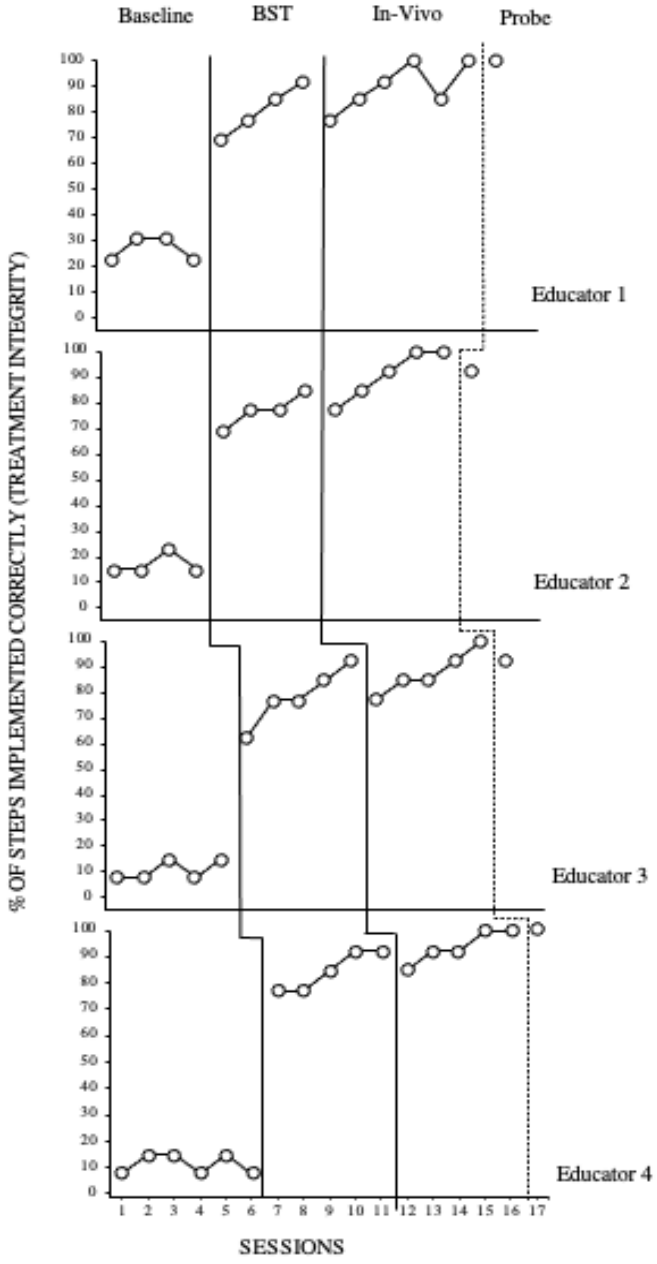


Figure 2

Results *for FCT without extinction for the student participant*

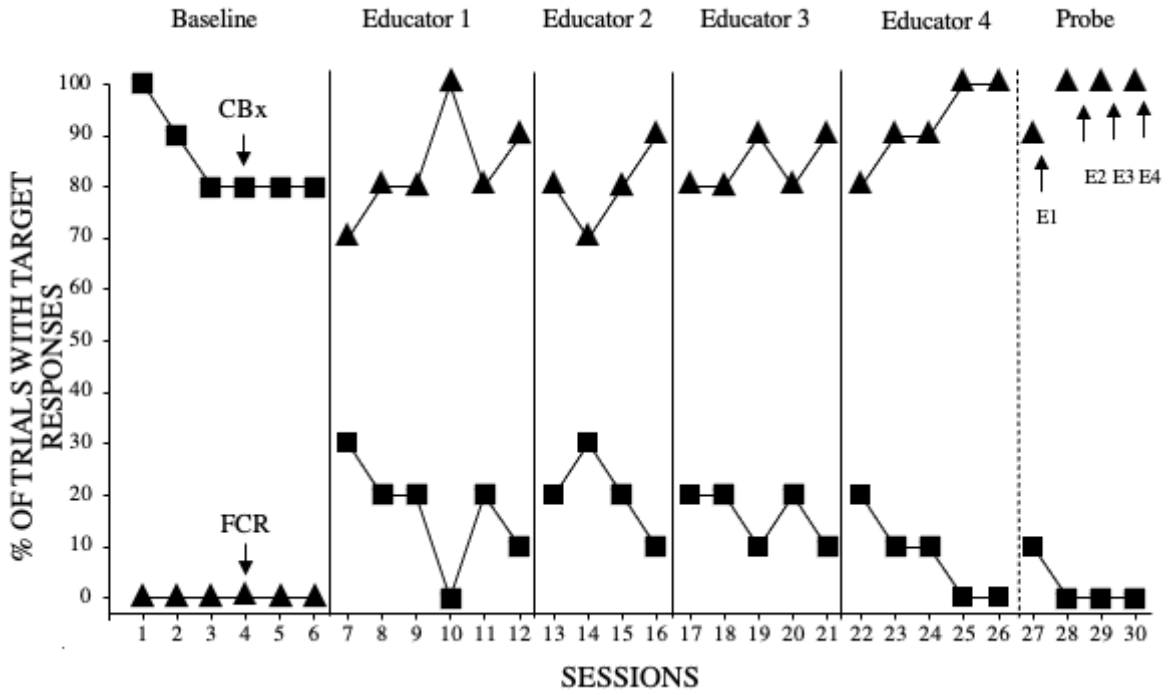
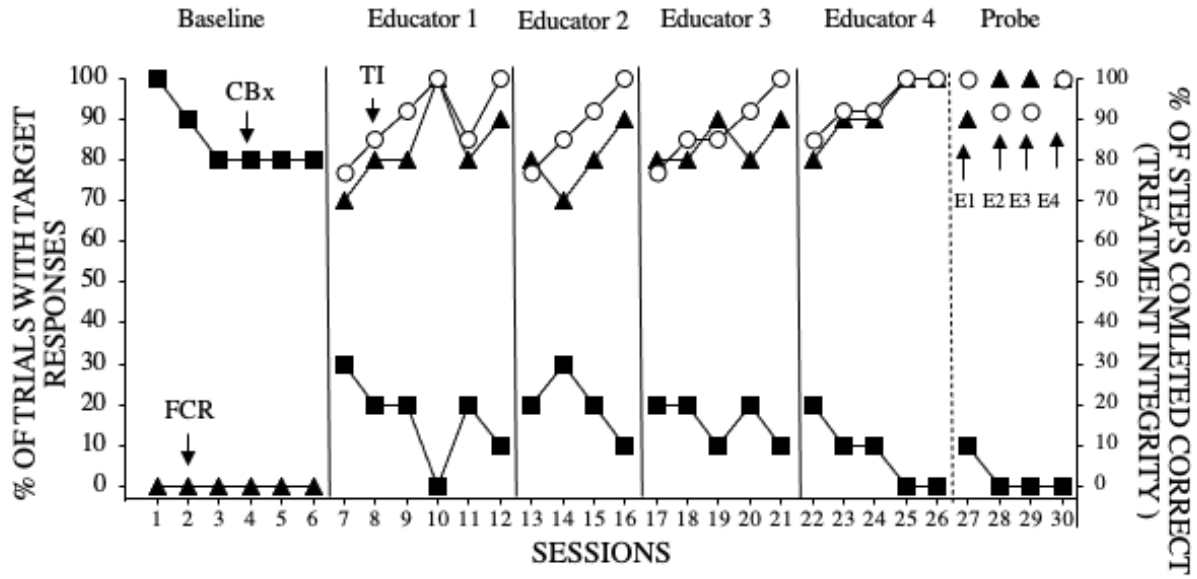


Figure 3

Results for FCT without extinction for all educators and student participant



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Appendices

Table 1

FCR Training

Step #	Mand Training Procedures
1.	Educator presents discriminative stimulus to evoke behaviors ● For attention – educator begins session by turning away from student ● For tangibles – educator begins session by removing wanted items. ● For escape – educator begins session by placing demand on the student
2.	Educator provides instruction to student to engage in FCR - "give me the" "say iPad® please" ● For students who require tools such as picture exchange, items will be provided from the beginning of the training
3.	Use most to least prompting to teach student to emit FCR a) If the student responds appropriately– provide praise/tangible reinforcement/break. b) If student does not respond, begin prompts – provide modeling (initial sound/gesture), then role-play the FCR and show access to reinforcement (praise, tangible, break) for engaging in FCR. c) If student responds but not appropriately provide correction for FCR, then proceed to (a) or (b). d) If necessary, for students with limited verbal responses, educator may use partial physical of full physical prompts to engage in the FCR, then provide reinforcement (praise, tangible, break) for engaging in FCR.
4.	Prompts will be faded from most to least ● Full physical ● Partial physical ● Model - provide initial sound/gesture ● Gestural cue (point to mouth or object)
5.	Once student responds independently (100%) for two full sessions, prompts will end.

Table 2

BST Coaching Procedures

Step #	Procedures	Yes	NO
1.	Give rationale for the use of FCT without extinction as an intervention.		
2.	Verbally describe the steps of FCT intervention.		
3.	Provide a written description of the FCT steps.		
4.	Demonstrate the FCT procedures by modeling it for participant being trained.		
5.	Check for understanding by asking questions.		
6.	Answer all questions asked.		
7.	Provide participant being trained with all materials needed, listed in the written description.		
8.	Have participant rehearse the FCT steps using role-play and various scenarios.		
9.	Monitor and observe the participant while they rehearse.		
10	Mark steps completed correctly and incorrectly on FCT steps data sheet.		
11	Give feedback, provide praise for all steps completed correctly and discuss missed steps.		
12	Ask participant to provide their own feedback for rehearsal/role play (correct vs. incorrect).		
13	Check for understanding by asking if there are any questions.		
14	Answer all questions asked.		
15	Repeat steps 7-13 until participant has reached mastery criterion and can complete the steps independently.		

_____/_____ *** 100 =** _____

 # Correct Completed **Total** **Treatment Integrity**

Table 3

FCT Procedural Fidelity

Step #	FCT w/out EXT manipulation (Quality + Magnitude)	Tally Correct	Tally Incorrect
●	Reinforcement favors the FCR (alternative behavior)		
●	Timer is set and is used to prompt educators to deliver reinforcer at appropriate time.		
1.	Educator presents discriminative stimulus to evoke behaviors ● For attention – educator begins session by turning away from student. ● For tangibles – educator begins session by removing wanted items. ● For escape – educator begins session by placing demand on the student.		
2.	● Contingent On: o If student emits challenging behavior = then low quality, low magnitude reinforcer is given (5 s). o If student emits FCR = then high quality, high magnitude reinforcer is given (20 s).		

_____/_____ * 100 = _____

Tally Correct Total Procedural Fidelity