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Prevent-Teach-Reinforce for Young Children: A Program Description and Demonstration of Implementation in an Early Childhood Setting

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Abstract

This article describes Prevent-Teach-Reinforce for Young Children (PTR-YC), a model based on extensive research that is designed for feasibility and effectiveness for treating challenging behaviors in classroom settings. This model is designed to meet the needs of children with and without disabilities who engage in challenging behavior that interferes with their learning and social development. This article contains a description of the PTR-YC model and presents a case study demonstrating the use of the model in an early childhood educational setting. The case study illustrates the PTR-YC process as implemented by a school-based team and presents the effectiveness of the procedures.

Keywords: Prevent-Teach-Reinforce for Young Children, positive behavior support, challenging behavior, functional behavior assessment, function-based interventions

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Case background: Chris is a 4-year-old boy who has been attending a public-school pre-kindergarten classroom for ten months. He is diagnosed with Autism and has notable delays in communication. He produces a few words but his articulation is poor and limits understanding. Instead, he engages in problem behavior in order to have his needs met. Mrs. Fritz, Chris's teacher, has concerns about his aggressive behavior towards adults and peers, his noncompliance, and poor communication skills. Chris's problem behaviors include physical aggression, off-task behavior, and lengthy transition time. Throughout the time that Chris has been in her classroom, Mrs. Fritz has implemented differing developmentally appropriate strategies to address Chris's challenging behavior with little success. After speaking with Chris's mother and other classroom members, Mrs. Fritz decided that an individualized plan was needed in order to address Chris's challenging behaviors. Mrs. Fritz decided to use the Prevent-Teach-Reinforce for Young Children (PTR-YC) model.

Toddlers and preschoolers who engage in challenging behavior not only present difficulties for themselves, but also for their teachers, parents, and peers (Strain & Timm, 2001). Challenging behavior can take the form of tantrums, aggression, property destruction, non-compliance, withdrawal, and unresponsiveness. Regardless of the form it takes, when challenging behavior persists it interferes with the child's development of prosocial interactions and competencies. Thus, steps should be taken to assist the child in establishing a healthier social-emotional repertoire and to aid in the reduction of challenging behavior (Dunlap, Lee, & Strain, 2013), as such interventions can be essential in preventing short- and long-term histories of anti-social behavior and school failure (Dunlap et al., 2013; Shonkoff & Phillips, 2000).

Research documents the favorable effects of interventions for challenging behavior. Many of the techniques used in recent research are based on the principles of applied behavior analysis and the positive behavior support process (Bamabara & Kern, 2005; Carr et al. 2002; Cooper, Heron & Heward, 1987; Sailor, Dunlap, Sugai, & Horner, 2009). Data derived from functional behavioral assessments (FBAs) most often guide the intervention process. Interventions resulting from the data collected during an FBA are individualized to meet the needs of each child, but there are key components each may contain: (a) manipulations of antecedent and contextual stimuli; (b) instructional strategies designed to build effective alternative replacements to challenging behavior based on the function of the challenging behavior; and (c) consequences that emphasize positive reinforcement procedures (Dunlap, Lee, & Strain, 2013). Although the majority of research on challenging behaviors has been conducted with

school-aged children, the same general findings have been found in young children ages two to five (e.g., Conroy, Dunlap, Clarke & Alter, 2005).

Despite research demonstrating effective strategies for managing challenging behavior the strategies are not often implemented or implemented with high levels of fidelity. The majority of the research on challenging behavior has not been conducted in the school setting; that is, the studies take place under very controlled conditions and are monitored by experts. In instances where interventions were implemented in a classroom setting, school personnel are likely coached by expert consultants who ensured the fidelity of the procedures. At present, very little is known about the frequency of use of evidence-based practices by teachers and school personnel throughout the course of a typical school day. It is our experience that the likelihood that evidence-based strategies are implemented with fidelity is low (Dunlap, Lee & Strain, 2013).

Dunlap and colleagues (2010; Dunlap, Wilson, Strain & Lee, 2013) have developed two manuals intended to address the fidelity and effectiveness of behavior support procedures in classroom settings and that are practical for use by classroom personnel. The first model is Prevent-Teach-Reinforce (PTR) (Dunlap et al., 2010). This model was developed for use by school personnel and was designed to enhance the fidelity of interventions resulting from the positive behavior support process. The manual presents a step-by-step process that utilizes FBA strategies, progress monitoring, menu-driven interventions, and self-evaluations. The effectiveness of the PTR model was demonstrated in a randomized controlled trial in which data showed that the students assigned to PTR had statistically significant improvements in social skills and problem behavior compared with students assigned to a services-as-usual condition (Iovannone et al., 2009). The same superiority has been shown in single subject experiments (e.g., Strain, Wilson, & Dunlap, 2011). However, one limitation to PTR is that the assessment process and menu of interventions was not always applicable to children of toddler age or in pre-kindergarten classrooms (Dunlap, Lee, & Strain, 2013).

Based on feedback that PTR was not a perfect-fit for young children, Dunlap and colleagues designed Prevent-Teach-Reinforce for Young Children (PTR-YC). This manual was developed in order to provide a standardized, effective, and practical process for individualized behavior support for classrooms teaching toddlers and preschool-aged children. The PTR-YC model is based on that of PTR, but was revised to meet the needs of the early childhood education settings (e.g. Head Start, private child care, publicly funded preschool)

and younger children with challenging behaviors (Dunlap, Lee, & Strain, 2013). The following article describes the PTR-YC model. A complete description of the model is available in the published manual (Dunlap et al., 2013).

Prevent-Teach-Reinforce for Young Children (PTR-YC)

PTR-YC is a positive behavior support model designed for use with toddlers and preschool age children who engage in serious and persistent challenging behavior that has not responded to less restrictive guidance and intervention strategies. The model is intended for use in early childhood group care and schools. PTR-YC is an individualized and rigorous approach requiring team meetings, data collection, a FBA, and careful application of individualized and assessment-based intervention procedures (Dunlap, Lee, & Strain, 2013). A recently-completed study of 160 preschool-aged children, using a randomized controlled design, showed that the PTR-YC group produced statistically significant improvements in social skills and reductions in challenging behavior compared with a group that received the usual interventions that were used in the preschool classrooms (Dunlap, Strain, Lee, Joseph, & Leech, 2018).

Among other tertiary approaches based on behavior analysis and positive behavior support (Bambara & Kern, 2005; Brown, Anderson, & DePry, 2015), PTR-YC is considered to serve as an intensive and individualized component of a multi-tiered framework (Dunlap, Lee, & Strain, 2013) such as the Pyramid Model (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003). Thus, prior to implementing the PTR-YC process teams should first conduct simple environmental assessments in order to evaluate if classroom-wide practices are being implemented with fidelity. If classroom-wide practices are not being implemented with fidelity, it is suggested that the practices are implemented with integrity prior to, or in conjunction with, the start of the PTR-YC process. The justification for this suggestion is that classroom-wide interventions that are implemented with high levels of fidelity often serve to reduce or eliminate challenging behaviors without the need for more intrusive and intensive intervention (Dunlap, Lee, & Strain 2013). The specific class-wide interventions identified by the authors of PTR-YC (Dunlap et al., 2013) are:

1. Use of a 5:1 ratio of positive to negative or neutral attention;
2. Use of clear, predictable schedules that are prominently displayed and taught to all children;

3. Use of routines and routines within routines—that is, embedding multiple routines within the daily routines to enhance predictability;
4. Direct teaching of behavioral expectations within each of the contexts of the daily schedule, and;
5. Direct teaching of peer-related social skills.

Extensive research has demonstrated that the consistent implementation of these five practices can greatly reduce the occurrence, frequency, and intensity of challenging behavior (Dunlap, Strain, & Fox, 2012; Dunlap et al., 2013).

Step 1: Teaming and Goal setting

The first step in the PTR-YC process is to identify team members that are committed to helping the child engaging in challenging behavior. The process is typically initiated by one or two individuals who determine that the challenging behavior requires an individualized approach. The individual who initiates the process typically serves as the team facilitator and should be the most familiar with the PTR-YC process. Each team will vary in size depending on participants; however, all members should be in direct contact with the child and have direct experience with the child. Additionally, all members should have an interest in positive behavior change for the child. The child's teacher is required to be a member of the team and other classroom staff or school personnel (e.g. speech pathologist, principal, counselor) that have contact with the child should be included in the process. It is also highly recommended that the child's parents participate in the PTR-YC process; however, this is not required. All decisions that are made throughout the various steps of the PTR-YC process are a team effort.

After the PTR-YC team is established, the next step is to identify and set short-term behavior change goals for the student. Goals that are selected and set should be able to be reasonably met in about two to three months. The goals that are selected should also identify what challenging behavior the team would like to decrease and what desirable behaviors the team would like to replace the challenging behavior with. The team should then select one challenging behavior and one desirable behavior to begin the PTR-YC process in order to increase the likelihood that the teams will be more successful in creating and implementing a function-based behavior plan.

In summary, action steps for Teaming and Goal Setting are as follows:

1. Identify team members that are committed to assisting in the behavior change process

2. Identify a team facilitator, this should be the member that is most familiar with the PTR-YC process
3. Identify and establish short-term behavior reduction goal
4. Identify and establish short-term replacement behavior goal
5. Schedule Meeting 2 for data collection

Mrs. Fritz established a team for Chris consisting of herself, his mother, the school speech and language pathologist, and the classroom assistant. The team met and identified short and long-term behavior change goals for Chris. During the discussion, the team concluded that the following areas were problematic for Chris: (1) Physical aggression; (2) off-task behavior; and (3) the length of time it took for Chris to complete a transition in the classroom.

After discussing each of the problem areas, the team selected physical aggression as the primary target behavior for Chris as he engaged in episodes of aggression (per report) for over 30 minutes (total) per day, limiting his and his peers' access to the classroom curriculum. Next, the team operationally defined physical aggression as Chris engaging in hitting, kicking, and/or throwing items in the classroom with or without targeting another peer or adult in the room. Hitting was more specifically defined as any occurrence of Chris's hand coming into contact with a peer or staff member with enough force to leave a mark. Kicking was further defined as any occurrence of Chris's foot coming into contact with classroom materials, peers, or staff with enough force to cause damage to the material or to leave a mark on a peer or adult. Lastly, throwing items was defined as any time Chris propelled objects with enough force through the air using his arm and hand.

After selecting the target behavior for reduction, the team discussed the various skills that they would like Chris to demonstrate. The team outlined three areas that they would like to see improvement in: (1) on-task behavior; (2) expressing frustration; and (3) functional communication. After some discussion, the team selected functional communication as the behavior they would like to increase. Functional communication was then operationally defined as when Chris vocally or non-vocally (through the use of a visual system or gestures) expressed his wants and/or feelings. Chris' team concluded the meeting, and scheduled a follow-up meeting to discuss data collection.

Step 2: Data Collection

The second step in the PTR-YC process is for teams to design and implement a clear, simple, and valid system for collecting data (Dunlap, Wilson et al., 2013). Data collection is intended to be reasonable for classroom personnel who have multiple responsibilities throughout the school day. Therefore, frequency counts (if the behavior is discrete and obvious) or behavior rating scales (BRS) are recommended. The BRS is a perceptual rating completed by the classroom staff at the end

of a designated period during the school day. Typically, the BRS is recommended for use given the ease of implementation and the reliable and accurate data that can result (Iovanne, Greenbaum, Wang, Kincaid, & Dunlap, 2014). Using the BRS, classroom staff can measure behavior in terms of frequency, duration, intensity, percentage of time, or percentage of opportunities. The PTR-YC team decides what behavioral dimension is most important to measure and the period of time during which data will be collected. The behavior is then rated on a scale of one to five, with the team developing anchors to determine what each value (number) represents. Data is then collected once per day or observation period, based on the team's decision.

After the team selects the data collection method and identifies the behavioral dimension that will be measured, the anchors for the target challenging and replacement behaviors can be determined (if using the BRS). In addition, the observation period for measurement and the person responsible for data collection will be identified. From this point on, and for the remainder of the PTR-YC process, data will be collected and will serve as an indicator of progress in order to assist teams in determining the efficacy of the behavior plan (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013).

Action steps for the Data Collection process are:

1. Select data collection method
2. Select behavioral dimension to be measured
3. If using the BRS, establish anchors for measurement
4. Select observation period for measurement
5. Select person responsible for measurement
6. Schedule Meeting 3 for summary of functional behavior assessment data

Chris's team reconvened in order to discuss data collection procedures. After discussing possible ways to collect data, the team decided to use the Behavior Rating Scale (BRS). An example of Chris's BRS data sheet is illustrated in Figure 1. Mrs. Fritz decided that she would like to take both frequency and duration data for each occurrence of physical aggression throughout the school day. That is, Mrs. Fritz used the BRS data sheet to record frequency data for each occurrence of the target behavior as well as how long each occurrence lasted in order to measure the amount of time Chris was not engaged in appropriate academic tasks. The team based this decision on the fact that aggression tended to last for extended periods of time and included occurrences of hitting, kicking, and throwing; thus the team chose to use duration as their dimension for measurement as recording the frequency of each individual topography was impractical. The team also decided that the frequency of a discernable episode (separated by at least one minute from the

Form
4

PTR-YC Behavior Rating Scale

Child: Chris Rater: Mrs. Fritz Observation period: _____ month: Oct/Nov 2013

Date/time

	10/8/13	10/9/13	10/10/13	10/11/13	10/21/13	10/22/13	10/23/13	10/28/13	10/29/13	10/30/13	10/31/13	11/1/13	11/4/13	11/5/13	11/11/13	11/12/13	11/13/13	11/14/13	11/18/13
Desirable behavior Functional communication	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
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Challenging behavior Aggression	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
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Desirable behavior: Functional Communication
5 = independently communicates
4 = echoic response
3 = gesture response
2 = visual response
1 = full model or combination

Challenging behavior: Aggression
5 = 30 mins or more
4 = 20-29 mins
3 = 10-19 mins
2 = 5-9 mins
1 = under 5 mins

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Figure 1. Chris’s Behavior Rating Scale Completed by Team Members.

previous occurrence) would be recorded, however a more sensitive and valid measure was the cumulative duration of the aggressive episodes. Following the selection of the dimension for measurement, the team identified the following anchors for physical aggression: (5) duration of 30 minutes or more; (4) duration of 20–29 minutes; (3) duration of 10–19 minutes; (4) duration of 5–9 minutes; (5) duration of under five minutes. Mrs. Fritz decided that she would like to collect data on the response form Chris emitted when engaging in functional communication. Therefore, the following anchors were determined for functional communication training: (1) full model; (2) visual response; (3) gestural response; (4) echoic response; (5) independent response. After establishing the anchors for the BRS, the team scheduled a meeting for Step 3, and Mrs. Fritz began her baseline data collection.

Step 3: Functional Behavioral Assessment

At the core of the PTR-YC process is the individualized functional behavioral assessment (FBA). This process allows the understanding of environmental factors that influence challenging behavior and provides guidance for the intervention process. The FBA portion of PTR-YC is designed to be as practical and inexpensive as possible. The FBA process consists of three checklists: (a) antecedent influences

(Prevent); (b) the function or purpose of the challenging behavior, which assists in identifying a functionally-equivalent intervention (Teach); and (c) the reinforcers and other consequences that have maintained the target challenging behavior and stimuli that could serve as possible reinforcers for the desirable replacement behavior (Reinforce). The checklists consist of multiple choice and open-ended questions appropriate for the early-childhood setting. Each team member independently completes the three checklists, a process that takes approximately 10–15 minutes (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013). Complete checklists and descriptions are available in the PTR-YC manual (Dunlap, Wilson et al., 2013).

After the checklists are complete, the team meets to summarize the data. This meeting consists of a review of each checklist and the transferring of data to the FBA summary table, which helps the team identify patterns in the data. Following the summary, the team will then create a hypothesis statement regarding the related variables that are contributing to, and maintaining, the target problem behavior (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013).

Action steps for the Functional Assessment Process:

1. Complete the Prevent checklist (antecedent influences)
2. Complete the Teach checklist (assess function of challenging behavior)
3. Complete the Reinforce checklist (assess maintaining consequences for challenging behavior)
4. Team meets to summarize data:
 - a. Review each checklist (Prevent, Teach and Reinforce) and transfer data for all three checklists to the FBA summary table
 - b. Based on the FBA summary table, identify patterns in the data
 - c. Create a hypothesis statement summarizing related variables that are contributing to, and maintaining the challenging behavior
5. Schedule Meeting 4 to formulate the behavior intervention plan

When Chris's team met for a third time they reviewed the Functional Behavior Assessments that were completed by Mrs. Fritz, the classroom assistant, Chris's mother, and the speech and language pathologist. The team compared their answers on the three forms, and consistent results were observed across those reporting. More specifically, aggression occurred when Chris was instructed to transition to a non-preferred activity or when he was instructed to terminate a preferred activity (Prevent Data). Thus, Chris was

delaying the transition to the non-preferred activity or the termination of the preferred activity (Teach Data). As a result, Chris was obtaining attention from adults and peers and delaying non-preferred tasks (Reinforce Data).

Functional behavior assessment results in relation to functional communication training revealed that the use of visual supports, a token board, and a first then schedule might assist the team (prevent). Both Teach and Reinforce data noted that team members would like Chris to request his desires and feelings. Reinforce data also indicated that Chris would respond to immediate social praise as well as access to preferred tangible items, such as an iPad.

Chris's FBA data was summarized in Form 8, and the following hypothesis statement was created.

Hypothesis: When Chris is asked to transition to a non-preferred activity, or terminate a preferred activity, he then engages in physical aggression, and as a result delays the presentation of the non-preferred activity and obtains attention from adults and peers. Following the review of the FBA data, Chris's team scheduled a fourth meeting to formulate his individualized behavior plan.

Step 4: Behavior Intervention Plan

After the team has completed the FBA process, they meet to select appropriate intervention strategies, develop a behavior plan, and prepare for implementation of the plan. The PTR-YC behavior plan should contain at least one strategy from each of the Prevent, Teach, and Reinforce components in order to create a vigorous intervention. The components that the team selects should be linked to the hypothesis statement that the team created based on the FBA process and should be empirically-validated. In addition, strategies should be selected based on the skill level of the team (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013).

Once the team selects strategies a written behavior plan should be created. A written behavior plan is a crucial part of the PTR-YC process, as it ensures that the team has considered all the details regarding the strategies that have been selected. Additionally, this process ensures that team members are comfortable with the plan they have formulated. This document should detail the implementation of the intervention and thoroughly describe the steps of the plan, the materials that are needed for implementation, who is responsible for implementation, and what consequences the child will come into contact with contingent on desirable behavior. If there is a need for training within the behavior plan, or fidelity checks throughout the course of the intervention, these details should also be included in this written document (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013).

Action steps for formulating the Behavior Intervention Plan:

1. Select appropriate intervention strategies
2. Develop a functionally-equivalent behavior plan
3. Write the behavior plan
 - a. Identify student, team members
 - b. Identify and define problem behavior
 - c. Identify and define replacement behavior
 - d. Outline Prevent Strategies
 - e. Outline Teach Strategies
 - f. Outline Reinforce Strategies
 - g. Outline data collection methods and frequency of review of data
4. Plan for implementation of the behavior plan
5. Schedule Meeting 5 for data review and plan modifications (if necessary)

For the fourth meeting, Chris's team met to develop his individualized behavior plan. The team selected strategies from each of the PTR-YC components. First, a token board was selected (Prevent) for which tokens would be pre-loaded at the start of the intervention and gradually faded out until Chris was earning each token independently. In addition, the team would use a first-then card to provide a visual for Chris that once he completed the present non-preferred activity he would gain access to his preferred item/activity. The team then decided they would teach functional communication skills throughout the school day (Teach) using visuals and modeling. During all classroom activities, Chris would be prompted to request a preferred item. Once Chris earned the target number of tokens, the reinforcer would be delivered. Lastly, reinforcement would occur contingent on Chris appropriately requesting his desires and feelings (Reinforce), in place of engaging in physical aggression.

Step 5: Using Data and Next Steps

Continual progress monitoring throughout the course of the intervention is vital. If the data does not indicate progress, then modifications must be made to the behavior plan. Lack of progress could be related to the design of the intervention itself, or the fidelity of implementation. When analyzing the data, the most common modifications that are required are: (a) improving the fidelity of implementation; (b) selecting a more powerful reinforcer for desired behavior; and (c) conducting an additional FBA to more accurately identify the function(s) of the target problem behavior (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013).

Data should continue to be collected when they indicate progress until responding has remained stable over the course of a few weeks.

Behavior Intervention Plan

Child: Chris

Parent: H

Team Members: parents, teacher, SLP, aide

Method of home-school communication: Daily homenote

Hypothesis: When Chris is asked to transition to a non-preferred activity then he engages in aggression as a result, the activity is delayed.

Implementation Phases

Week one: 10/8/13 Goal Sheet and begin data collection on challenging behavior

Week two: 11/8/13 Checklists – Prevent, Teach, Reinforce and Summary Table

Week three: 11/18/13 Behavior Intervention Plan Summary, prepare materials for individual interventions

Week four: 12/9/13 begin implementation of individualized strategies

Behavior to decrease: Aggression – When Chris engages in hitting, kicking, and/or throwing items with or without the intent to target an individual

Behavior to increase: Functional communication – When Chris verbally or non-verbally expresses his desires and/or feelings

Christian's warning signs: Say "no", will drop to the floor, or elope from activity

Prevent strategy: Use visual supports (rules/expectations) and first/then card

1. Adult will review the classroom rules and expectations with Chris
2. Adult will review first/then card with Chris (First ____ (activity), the ____ (reinforcer))
3. Adult will deliver praise appropriate behavior

Teach strategy: Teach functional communication skills

1. During classroom activities, adult will prompt Chris to request the reinforcer during activities.
2. Chris will receive the reinforcer after he receives 5 stickers.
3. Adult will set a timer.
4. When timer goes off, Chris will turn the timer off and give the reinforcer back to the adult.
5. Chris will return to activity.

Reinforce strategy: Reinforce desirable behavior

Materials needed: Token board, stickers, and icons for each activity

1. Chris will follow the classroom daily schedule.
2. As soon as Chris follows the instruction (transition or work task), an adult will give him a sticker on his token board.
3. When Chris receives five stickers, he will get a reinforcer for 5 minutes.
4. The team will start with the token board preloaded with 4 stickers/stars.
 - a. When Chris has 3 days with one behavior or less, remove one of the preloaded stickers.
 - b. 3/19/14 Token board is currently preloaded with 1 sticker

Using Data

The team will meet every 2 weeks to review the data and progress once the classroom practices have been implemented. All information including data on homenote and data collection will be shared with Chris's family. If Chris's behavior does not improve, team will meet to discuss revisions/modifications to the behavior intervention plan

Figure 2. Chris's Behavior Plan Developed by Team Members.

After this time, the team should reconvene and plan for maintenance or the inclusion of additional target behaviors (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013).

Action steps for Using Data and Next Steps:

1. Determine intervals for progress monitoring (i.e. ever week on Friday)
2. If data indicate progress is being made continue with the intervention until data is stable over the course of a few weeks
 - a. After data demonstrates stability over a few weeks plan to have the team reconvene to discuss maintenance or the possible inclusion of additional target behaviors
3. If data indicate progress is not being made, the team should reconvene to evaluate the design of the intervention, the fidelity of the intervention, or the possible need for an additional FBA
 - a. A plan for implementing modifications should be written
 - b. The person responsible for implementing modifications or conducting an additional FBA should be identified
 - c. A follow-up meeting should be scheduled with the team to reassess progress following the implementation of modifications or to evaluate additional data from the second FBA

Throughout the course of the intervention, a reduction in the frequency of physical aggression was observed as well as an increase in the frequency of functional communication. Figure 1 illustrates the BRS data, of inappropriate behavioral episodes (physical aggression) exceeding five minutes and independent functional communication. Figure 1 also includes maintenance data collected at six-month intervals following the implementation of the intervention. Mrs. Fritz and her staff implemented the intervention with fidelity (range from 80 to 100%). After the intervention, Chris was able to participate in a general education kindergarten class for the majority of his day as he continued to demonstrate appropriate behavior and maintain zero levels of problem behavior. Given his behavior has maintained for the two years following intervention, Chris will be transitioned from a self-contained educational placement to a resource caseload at the start of the next school year.

Summary

Research has documented the effectiveness of the PBS process to address challenging behavior in the early childhood educational setting (Dunlap, Lee, & Strain, 2013). Recently, Prevent-Teach-Reinforce for Young Children was designed to assist in the implementation of individualized interventions with children of early childhood age.

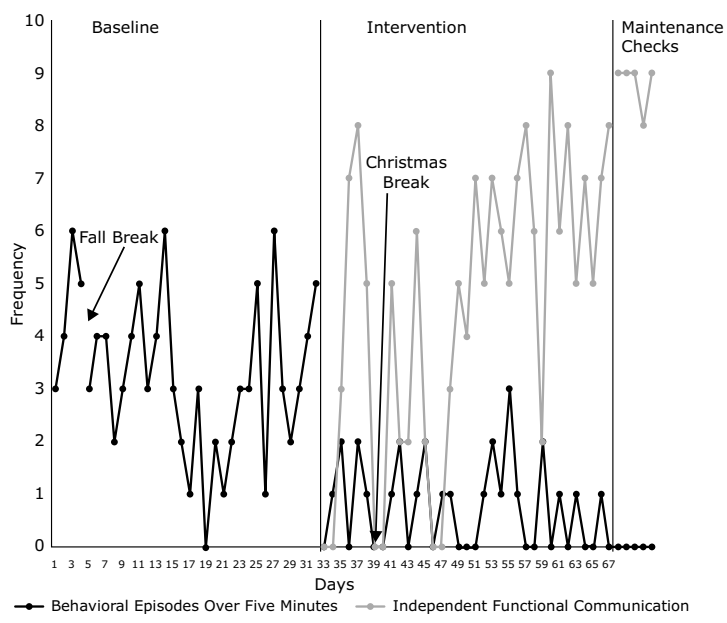


Figure 3. Chris’s number of behavior episodes lasting over five minutes during all study conditions and Chris’s number of independent function communicative responses following the introduction of the intervention.

This manual was designed to increase the effectiveness of interventions and aid in the facilitation of the intervention process (Dunlap, Lee, & Strain, 2013; Dunlap, Wilson et al., 2013).

Since beginning of the PTR-YC process, Chris’s team met to identify target behaviors, collect data, and identify the hypothesized function of the target problem behavior. Following the identification of the function of the target problem behavior, the team formulated a behavior plan to address the challenging behavior using the Prevent, Teach, and Reinforce strategies provided in the PTR-YC manual. The behavior plan was then implemented and the level of fidelity was monitored. Following the implementation of the behavior plan, Chris demonstrated progress within the first week, and continued to improve over the course of the next two months of intervention. Chris’s teacher, teacher assistant, and speech pathologist collected data to illustrate the effects of the intervention. Chris’s target problem behavior, physical aggression, decreased rapidly from 30-minute episodes to episodes lasting under five minutes within three days following the implementation of the intervention. Chris’s desirable alternative behavior (functional communication) increased from only prompted responses to independent responses in just one day following the implementation of the intervention. Using the PTR-YC pro-

cess, Chris's team was able to strengthen his communicative repertoire as well as strengthen and expand his social-emotional repertoire, allowing him to participate more fully in both his self-contained and general education classroom settings.

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