

**Minutes:** North Tidewater Community of Practice in Autism (NT CoPA)  
**Topic:** Pivotal Response Training  
**Date:** October 13, 2009  
**Location:** Healthy Families Partnership Building, Hampton  
**Participants:** 6

### **Pivotal Response Training: Parent – Professional Collaboration**

Pivotal Response Training (PRT) has evidence that supports their model of parent-professional collaboration for early intervention. Professionals teach parents about pivotal behaviors of autism spectrum disorder and intervention that includes a natural language paradigm and motivational principles.

12:30-12:45 Introductions & Overview

12:45-1:30 Overview of the PRT Model – Parent-Professional Collaboration  
Key Pivotal Response/Areas  
Motivation Discussion

1:30-2:15 Review of Key Points

Developing Age Appropriate Strategies

2:15-2:30 Summary, Evaluation, and Next Steps

See attached handouts

#### **Questions to Consider:**

What are the critical features of Pivotal Response Training?

What is parent-professional collaboration as defined by PRT?

What are age-appropriate interventions according to the PRT model?

**Next Meeting:** November 10, 2009

## **Pivotal Response Training (PRT) An Overview**

Koegel and Koegel (2006) state that PRT uses both a developmental approach and an applied behavioral analysis (ABA) procedures. PRT aims to provide opportunities for learning within the context of the child's natural environment.

Pivotal areas or responses are those that, when targeted, lead to large collateral changes in other – often untargeted – areas of functioning and responding. Pivotal responses, once acquired, result in widespread and generalized improvements in children with autism.

Five pivotal responses have been studied: motivation, responsivity to multiple cues, self-management, self-initiation, and empathy.

The PRT model includes a coordinated effort by all relevant stakeholders across people, settings, and environments. Parents and other family members are the primary intervention agents.

Motivation is primary for children with autism. The goal is to enrich the scope and sequence of the curriculum to include motivational procedures.

Children with autism often fail to comprehend the communication efforts of caregivers. They have a difficult time with response-reinforcer contingency leading to low levels of response and learned helplessness.

For young children, arranging the environment involves using preferred materials, those that the child is likely to find motivating across routines and environments (e.g., insight but out of reach, part of a toy). Motivational items or activities often include age-appropriate toys, games (e.g., chasing), and food.

Teaching interactions in the PRT model incorporate motivational procedures into discrete trials, wherein antecedents and consequences are systematically manipulated to produce a desired response or behavior. Consistent with incidental teaching, components of the procedure include:

- The child is engaged in a natural environment that is arranged to stimulate interest through use of preferred items and desired activities.
- The caregiver follows the child's lead and allows the child to become interested in a stimulus.
- The caregiver provides a clear opportunity to respond that is related to the child's interest.
- The caregiver immediately provides the preferred item contingent upon the child's attempt to verbally respond.

(pp. 4, 14, 15, 17)

Koegel, RL & Koegel, LK (2006). *Pivotal response treatments for autism*. Baltimore: Paul H Brookes.

### **Pivotal Response Training /Treatment**

Uses underlying principles of Applied Behavioral Analysis (ABA)  
Follows a developmental approach  
Involves parent education/collaboration  
Takes place in natural environment  
Focuses on natural language functional, social communication  
Targets 'pivotal areas' versus individual targeted behaviors

**Pivotal Areas** = Motivation, Responsivity to multiple cues, Self-initiations, Self-management

### **Behavioral Terms Used in PRT**

Antecedent – What happens before?  
Behavior – What the child does in response?  
Consequence – What happens as a result?

**Reinforcement** (positive is delivering something pleasant or negative is withdrawing something unpleasant) versus **Punishment** (withdrawal from something pleasant or delivering something unpleasant)

### **Presenting Opportunities**

**Model –Prompt** – the request is present within the opportunity and often paired with behavior. (e.g., father picks up the favorite toy (ball) and asks “Do you want the ball?” Child looks up and says “ball”.)

**Open-ended** – The response is NOT present within the opportunity: thus, the child generates a response independently. (e.g., Emily and her mother are playing with a doll house. Emily’s mother asks “What should the doll do? Emily points to the stairs and says “climb stairs.”)

**Time delay** – Parent uses behavior without language to present the opportunity. This requires that the child formulate a response independently. (e.g., Jack’s teacher holds a container of bubbles in front of Jack and waits expectantly for Jack to respond. Jack looks up and says “bubbles.”)

### **Examples of Environmental Arrangements**

- Interesting materials
- Inadequate portions
- Out-of-reach
- Choice making
- Assistance
- Unexpected situations

**Applied Behavior Analysis (ABA)** *E.g., Discrete Trial Training (Lovaas)*

### **A scientific approach to improving socially important behaviors**

- ABC / SRR sequences
- Direct measurement, single-subject study
- Functional assessment task analysis
- Setting event and establishing operation
- Stimulus control
- Generalization / maintenance
- Shaping, fading, prompting, chaining
- Reinforcement contingencies

Keogel, LK, Drazin, DG, Carter, CM, (1998). *A model for parent-professional collaboration*. University of CA, Santa Barbara.

### **Pivotal Response Training – Considerations for Parent-Professional Collaboration**

Considerations for goodness of fit and whether or not this type of intervention meets the needs of specific families.

- Family or life circumstances may inhibit success (e.g., a new baby in the home, family move, crisis, etc.).
- Families who cancel frequently do not seem to have favorable outcomes.
- Intervention strategies may need to be modified when families have low SES, varied ethnicity/cultural values, the families spend a lot of time watching TV, gender differences, etc. (e.g., Parents who are unable to read will need handouts explained to them.)

### **General Psychological Considerations (p. 9-10)**

- Parents are under extreme stress. Provide them with social support, provide suggestions, and facilitate networking opportunities.
- Parents of children with disabilities are often punished for their child's behavior. Provide parents with a lot of positive comments and feedback related to their child's strengths.
- The parents are the clients. The same principles of behavior (especially rewarding positive behavior) need to apply to parents and children.
- Provide practice with feedback. Parents need to work with their child and be provided with feedback, under normal family conditions, so that the family routines and values are considered.

Providers should:

- Listen and be supportive
- Offer opportunities for social support
- Provide positive feedback about strengths of child
- Reward parent's attempts and successes
- Provide practice with feedback

### **Preliminary Preparation (p. 10-12)**

Gather all appropriate history and use an informal session to gather information about the child, parent, and the provider's ability to develop a positive relationship with the child and parent. Goals may include informal assessment in the following areas:

1. Attention – Does the child attend to a task or does self-stimulatory behavior interfere with appropriate interactions?
2. Play – does the child use toys appropriately or engage in social play? Is the child reoccupied by specific activities?
3. Social interaction – Does the child show appropriate pragmatic behavior and interests in others (e.g., laughing and making eye contact)?
4. Social communication – Are communications functional?
5. Receptive and expressive language – Is the child using a variety of language functions?
6. Initiations – If the child is non-verbal, does he/she show things to others, leading an adult's hand, or respond to other's initiations?
7. Child's ability to entertain him/herself – What does the child do while the parent is interacting with the service provider? Is the behavior stereotypic? Does the child attempt to leave the area?
8. Parent issues – Are there any family needs or stresses that need to be dealt with for parent education to be effective?



## *How to Teach Pivotal Behaviors to Children with Autism: A Training Manual*

Koegel, R. L., Schreibman, L., Good, A., Cerniglia, L., Murphy, C., & Koegel, L.K. (1989).

University of CA, Santa Barbara & San Diego.

### **Pivotal Behaviors**

**Motivation** – One central problem in the development of children with autism is a lack of motivation. Research suggests that motivation may be increased leading to a dramatic effect upon the child’s learning.

**Responsivity to Multiple Cues** – Children with ASD often have “stimulus overselectivity,” which involves failure to use all of the important cues in their home or educational setting. Children with this attentional deficit have often learned to respond to just one cue interfering with learning new behaviors and generalizing learned behaviors.

Quick overview of the *Pivotal Response Training* program

Structuring the Learning Situation

1. The parent or teacher presents to the child an instruction, question, or other opportunity to respond.
2. The child responds.
3. The parent or teacher provides some consequence to the child depending on the child’s response.

### **Presenting the question/instruction/opportunity to respond: Points to remember.**

Point #1. Clear instructions - The question/instruction/opportunity should be clear, appropriate to the task, uninterrupted, and the child must be attending.

Point #2. Interspersed maintenance tasks - Tasks the child already can perform should be interspersed with acquisition (new) tasks.

Point #3. Child choice - To a large extent, tasks should be chosen by the child.

Point #4. Responsivity to multiple cues - The instruction/question should include multiple components.

### **Response to the child’s behavior: Points to remember**

Point #5. Direct reinforcers - Reinforcement must be contingent upon the behavior.

Point #6. - Rewards are appropriately used - Any goal-directed attempt to respond to the question, instruction, or opportunity should be reinforced.

Point #7. The reinforcer should have a specific relationship to the desired behavior.

Develop examples that we could use to teach the families we serve.

- Describe an instance where a family member of a young child would use each point in an instruction, question, or opportunity.
- Give an example of how not to respond in an appropriate way.

**Point #1.** The question/instruction/opportunity should be clear, appropriate to the task, uninterrupted, and the child must be attending (p. 10).

When presenting the child with a question, instruction, or opportunity to respond, it is important to first make certain to have the child's attention. Obviously, the child will learn little or nothing if he/she is not paying attention. The child should not be looking away from the parent, should not be engaging in self-stimulatory behavior or having a tantrum. The child should be attending to the task at hand. Once the child is attending, the parent should give an instruction that is clear and appropriate to what the child is doing at the time.

Read the example(s) and then come up with an example that we could use with the families that we serve. Describe a 'good' and 'poor' example. Have the family member describe an example in their real life circumstances.

- Write an example of a clear instruction that would be appropriate for the child in your care.
- Write an example of an unclear instruction that an untrained person might use.

**Point #2.** Maintenance tasks (tasks the child already can perform) should be interspersed with acquisition (new) tasks (p. 13).

When organizing the child's learning environment, it is important to intersperse maintenance tasks (i.e., tasks that the child has already mastered) with new and more challenging tasks. By doing this the child's motivation and self-confidence should be increased and maintained, enabling him/her to tackle novel tasks while still being highly successful overall. This allows the child to consistently add to his/her behavioral repertoire while being motivated. This is in contrast with a procedure that drills the child on new, more difficult tasks that may lead to frustration and loss of motivation.

Read the example(s) and then come up with an example that we could use with the families that we serve. Describe a 'good' and 'poor' example. Have the family member describe an example in their real life circumstances.

- Describe an instance where you could intersperse a maintenance task with an acquisition task for the child.
- Describe a situation where you may not have interspersed a maintenance task with an acquisition task.

**Point #3.** To a large extent, tasks should be chosen by the child. (p. 18)

Provide the child with the opportunity to have an active role in choosing the task or topic of conversation. **Shared control** allows the child to have a great deal of control over the teaching interaction. The child will be more motivated and interested in toys or subjects that they enjoy.

Whenever possible, parents should comply with their child's wishes so that the child will learn actions or language that results in changes to their environment. For example, when a child wants to stop, a parent should say "stop, I want to stop" or "no more" and stop what they are doing. Under no circumstances should a child be allowed to engage in any activity that is hazardous (e.g., aggression, self-injury) or unacceptable (e.g., self-stimulation). With a little practice and experience, one can become skilled at redirecting the child's attention and interest away from unwanted behaviors.

Turn taking is also shared control. It involves a give and take interaction between child and adult that takes place while they are involved in an activity that the child has chosen. Turn taking allows the adult to provide appropriate language models for the child to imitate and for the child to learn the give-and-take of social interactions.

- Identify instance(s) where the child could have a role in choosing the task or topic of conversation.
- Write an example of shared control and/or no shared control.

**Point #4.** The instruction/question should include multiple components (p. 23).

It is important to structure the environment in such a way as to increase the child's **responsivity to multiple cues**. By multiple cues or components, we mean that the child is aware of, and responds to, two or more units within the environment. Research indicates that children are repeatedly exposed to multiple cues, rarely are they exposed to just a single-cue instruction, in an everyday learning environment. Think about and choose tasks that require the child to use multiple cues.

- Write/describe an instruction that requires multiple components.
- Write an example that the child does not need to respond to multiple components.

**Point #5.** Reinforcement must be contingent upon the behavior (p. 26).

Any response to the child's behavior must be contingent upon the correct behavior or attempt. This means that the parent's response must be as immediate as possible after the child's response, must be appropriate to the response, and must be dependent upon the response. Never wait before providing the consequence, never reinforce an incorrect response, and never fail to reinforce a correct response or attempt. The exception would be for a well-established behavior. You would not want to reinforce every occurrence, because this would increase resistance and lead to non-reinforcement.

- Describe an instance where you would use contingent reinforcement.
- Describe an instance where you may not have reinforced a correct response or attempt.

**Point #6.** Any goal-directed attempt to respond to the question, instruction, or opportunity should be reinforced (p.30).

Any goal-directed attempt to respond to questions, instructions, or opportunities should be reinforced. Encourage the child to try by reinforcing attempts rather than risk discouraging the child by requiring only correct responses (which at the initial stages of training may be few and far between). Research says that children with ASD are more motivated by rewards for reasonable attempts. The child must be directing his/her attention, the attempt should be related to the task, and have emitted a reasonable amount of effort. We want the child to be encouraged, motivated, and to continue to try.

- Write an example of reinforcing a goal-directed attempt for the child.
- Write an example of not reinforcing a goal-directed attempt.

**Point #7.** The reinforcer should have a specific relationship to the desired behavior (p. 34).

The type of reinforcer is extremely important. All reinforcers should have a direct relationship to the desired behavior. The **direct response-reinforcer relationship** means that the reinforcer should be a natural consequence for the behavior. The main advantage of a direct reinforcer is that it is the type of consequence the child will normally receive in the natural environment and thus we expect the behavior/speech to generalize to this environment. If "help me, please" gets you help, you will probably use it again.

- Identify a task with a possible natural reinforcer for the task.
- Identify a reinforcer that does not directly relate to the task chosen above.

## **Pivotal Response Training – Teaching Strategies Examples**

Please write down examples that we could use to teach the families we serve. Hand them in and we will type them up and distribute back to you.

Point # \_\_\_\_ : \_\_\_\_\_

Describe an instance where a family member of a young child would use this point in an instruction, question, or opportunity.

Give an example of how not to respond in an appropriate way.