***Module:*** **Pivotal Response Training (PRT)**

# Overview of Pivotal Response Training (PRT)

Vismara, L.A., & Bogin, J. (2009). *Steps for implementation: Pivotal response training.* Sacramento, CA: The National Professional Development Center on Autism Spectrum Disorders, The M.I.N.D. Institute, The University of California at Davis School of Medicine.

Pivotal Response Training (PRT) is a method of systematically applying the scientific principles of applied behavior analysis (ABA) to teach learners with autism spectrum disorders (ASD). PRT builds on learner initiative and interests, and is particularly effective for developing communication, language, play, and social behaviors. PRT was developed to create a more efficient and effective intervention by enhancing four pivotal learning variables: motivation, responding to multiple cues, self-management, and self-initiations. According to theory, these skills are pivotal because they are the foundational skills upon which learners with ASD can make widespread and generalized improvements in many other areas.

## Evidence

PRT meets the criteria for an evidence-based practice with nine single subject design studies supporting its teaching practices. PRT constitutes an efficient and effective mode of intervention for promoting appropriate social communicative and adaptive behavior for children at the preschool and elementary school levels and for adolescents and young adults at the middle and high school level.

## With what ages is PRT effective?

According to the studies that form the evidence base for PRT, children from 2 to 16 years of age have benefitted from PRT intervention. Research has shown that the use of motivational techniques inside PRT's teaching framework can lead to 85-90% of children with autism, who begin intervention before the age of 5, developing verbal communication as a primary mode of communication. More recently, though, researchers have identified specific behavioral characteristics associated with favorable responses to the teaching practices. Precursors related to positive outcomes thus far, include increased use of social initiations, less social avoidance, more toy play, and stereotypic language.

## What skills or intervention goals can be addressed with PRT?

The focus of PRT is to teach children and youth with ASD certain **pivotal behaviors** through a set of specific training procedures, which, when learned, will lead to the development of new behaviors. The pivotal behaviors targeted in PRT are: motivation, responding to multiple cues, self-management, and self-initiations. By acquiring these behaviors children can learn skills in the areas of academics, social, language/communication, and self management. Improvements in these areas will promote a variety of social-communicative behaviors, such as communication, imitation, play skills, joint attention, and will reduce inappropriate, maladaptive behaviors.

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## In what settings can PRT be effectively used?

The ultimate goal of PRT is to provide learners with autism with the social and educational skills to participate independently in enriched and meaningful lives in inclusive settings. PRT emphasizes the importance of training parents as primary intervention agents; however, other family members (e.g., siblings, secondary caregiver), staff (e.g., teachers, school personnel, consultants), and typically developing peers are also included as intervention agents. As a result, PRT has been successfully implemented in a variety of naturalistic settings, including school, home, and community. Further, teaching in varied and more naturalistic environments has been demonstrated to promote generalization of skills.

## Evidence Base

The studies cited in this section document that this practice meets the NPDC on ASD's criteria for an evidence-based practice. This list is not exhaustive; other quality studies may exist that were not included.

### *Preschool*

Jones, E. A., Carr, E. G., & Feeley, K. M. (2006). Multiple effects of joint attention intervention for children with autism. *Behavior Modification, 30*, 782-834.

Koegel, R. J. L., Camarate, S., Koegel, L. K., Bea-Tall, A., & Smith, A. E. (1998) Increasing speech intelligibility in children with autism. *Journal of Autism and Developmental Disorders, 28*(3), 241-251.

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Whalen, C., & Schreibman, L. (2003). Joint attention training for children with autism using behavior modification procedures. *Journal of Child Psychology & Psychiatry, 44*(3), 456-468.

### *Elementary*

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Thorp, D. M., Stahmer, A. C. & Schreibman, L. (1995). Effects of sociodramatic play training on children with autism. *Journal of Autism and Developmental Disorders, 25*, 265-282.

### *Middle/High School*

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Dibley, S., & Lim, L. (1999). Providing choice making opportunities within and between daily school routines. *Journal of Behavioral Education*, *9*(2), 117-132.

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Dunlap, G., & Koegel, R. L. (1980). Motivating autistic children through stimulus variation. *Journal of Applied Behavior Analysis*, *13*, 619-627.

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Koegel, L. K., Koegel, R. L., Harrower, J. K., & Carter, C. M. (1999). Pivotal response intervention I: Overview of approach. *Journal of Association for Persons with Severe Handicaps*, *24*(3), 174-185.

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Schreibman, L., & Koegel, R. L. (2005). Training for parents of children with autism: Pivotal responses, generalization, and individualization of intervention. In E.D. Hibbs & P.S. Jensen (Eds.) *Psychological treatments for child and adolescent disorders: Empirically based strategies for clinical practice (2nd edition)*, (pp. 603-631). Washington, DC: American Psychological Association.