

TSHA Practice Brief: Pivotal Response Treatment for Autism Intervention

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As speech-language pathologists (SLPs), one clinical population with which many in the field frequently work are individuals on the autism spectrum (ASD). These individuals often present with challenges such as decreased skills in social communication, restrictive and repetitive behaviors, and other disruptive behaviors.

What is PRT?

Pivotal Response Treatment (PRT) is an evidence-based behavioral intervention based on applied behavior analysis (ABA) principles aimed at improving social communication skills in individuals with autism (Lei, Ventola, 2017). It has been identified by the National Standards Project of the National Autism Center as one of 14 Established Interventions for individuals with ASD from 0 to 21 years. Established interventions have the quality, consistency, and quantity of research findings to support the claim that the approach produces favorable outcomes (National Standards Report, Phase 2, 2015). PRT targets specific skills, or “pivotal areas” of a child’s development, including motivation, responsivity to multiple cues, self-management, and social initiations to make widespread improvements in communication, social skills, and behaviors. The goal of this intervention is to move a child toward a more typical developmental trajectory using motivational procedures such as child choice, rewarding attempts, interspersing maintenance and acquisition tasks, and using direct natural reinforcers to increase effectiveness of intervention. Some of these techniques may already be utilized by many speech-language pathologists but perhaps without the same level of structure or without the same systematic approach.

PRT was developed by Drs. Robert and Lynn Koegel from the University of California, and certification is available in-person or through a self-study program through their website. The PRT certification consists of five levels: Level I is an introduction to the treatment methodologies and research, Level II addresses first words and multiple word utterances, Level III generalizes PRT use to multiple children with ASD, and Level IV consists of three different emphases including teaching self-initiations, self-management, or facilitating social interactions, with a potential fourth area in the future regarding empathy. Level V instructs the clinician in training parents and professionals on implementing PRT.

Who Benefits From PRT?

PRT techniques can be utilized with individuals from 0 to 21, as many pivotal areas including self-motivation can be incorporated for adolescents and young adults. Children with autism that respond best to PRT are those who exhibit a moderate-to-high interest in toys, are tolerant of another person in close proximity to them, have low-to-moderate rates of nonverbal self-stimulatory behavior, and moderate-to-high rates of verbal self-stimulatory behavior (Sherer & Schreibman, 2005).

How Does PRT Compare to Other Interventions?

Research has been conducted to compare outcomes of PRT to traditional ABA therapy and other autism therapies. Compared to traditional ABA therapy, PRT was shown to result in greater generalization, decreased restrictive and repetitive behaviors, greater generalization to other non-

targeted areas (Mohammadzaheri, Koegel, Rezaee, & Rafiee, 2014), and a more significant decrease in disruptive behavior (Mohammadzaheri, Koegel, Rezaei, & Bakhshi, 2015). PRT also has been shown to result in decreased anxiety (Lei, Sukhodolsky, Abdullahi, Braconnier, & Ventola, 2017), increased frequency of utterances, and increased peer interaction (Brock, Dueker, & Barczak, 2018). Neuroimaging studies have shown functional rewiring of the brain, with changes localized to the posterior cingulate marked by a shift in connectivity from the orbitofrontal cortex to the occipital-temporal cortex following a 16-week PRT program (Venkataraman et. al, 2016). PRT also has been utilized to train parents and other professionals to support children and students with autism as well as to coach peers to interact with and support those on the autism spectrum.

While there are many promising outcomes to PRT and the increased structure may be more beneficial for some children on the spectrum than traditional speech therapy techniques, one downside for speech-language pathologists is the cost. PRT certification is quite costly, and its availability is not limited to SLPs. From a social communication and expressive language standpoint, it may, however, offer a potentially more functional alternative for those who presently offer ABA therapy. PRT also does address other challenges related to autism spectrum disorders that are often not addressed directly with other types of therapy, such as learned helplessness and instructing paraprofessionals in better supporting peer interactions. More research is needed to compare outcomes to other types of therapy, such as the Hanen parent training programs, DIR Floortime, and RDI, to see if the benefit may be worth the cost to obtain training for therapists with caseloads consisting of large numbers of individuals on the autism spectrum.

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