Module: Pivotal Response Training (PRT)

Evidence Base for Pivotal Response Training (PRT)

The National Professional Development Center on ASD has adopted the following definition of evidence-based practices.

To be considered an evidence-based practice for individuals with ASD, efficacy must be established through peer-reviewed research in scientific journals using:

- *randomized or quasi-experimental design studies.* Two high quality experimental or quasi-experimental group design studies,
- *single-subject design studies.* Three different investigators or research groups must have conducted five high quality single subject design studies, or
- combination of evidence. One high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups (across the group and single subject design studies).

High quality randomized or quasi experimental design studies do not have critical design flaws that create confounds to the studies, and design features allow readers/consumers to rule out competing hypotheses for study findings. High quality in single subject design studies is reflected by (a) the absence of critical design flaws that create confounds and (b) the demonstration of experimental control at least three times in each study.

This definition and criteria are based on the following sources:

- Horner, R., Carr, E., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single subject research to identify evidence-based practice in special education. *Exceptional Children, 71,* 165-180.
- Nathan, P., & Gorman, J. M. (2002). *A guide to treatments that work.* NY: Oxford University Press.
- Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. D., Thompson, B., & Harris, K. (2004). *Quality indicators for research in special education and guidelines for evidence-based practices: Executive summary.* Arlington, VA: Council for Exceptional Children Division for Research.
- Rogers, S. J., & Vismara, L. A. (2008). Evidence based comprehensive treatments for early autism. *Journal of Clinical Child and Adolescent Psychology*, *37*(1), 8-38.

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Using these criteria, the empirical studies referenced below provide documentation for supporting pivotal response training as an evidence-based practice. 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.
- Koegel, R. L., Dyer, K., & Bell, L. K. (1987). The influence of child preferred activities on autistic children's speech behavior. *Journal of Applied Behavioral Analysis, 20,* 243-252.
- Koegel, R. L., Koegel, L. K., Surrat, A. (1992). Language intervention and disruptive behavior in preschool children with autism. *Journal of Autism and Developmental disorders*, 22(2), 141-153
- Stahmer, A. C. (1995). Teaching symbolic play skills to children with autism using pivotal response treatment. *Journal of Autism and Developmental Disorders*, 25, 123-141.
- 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

- 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.
- Koegel, R. L., Dyer, K., & Bell, L. K. (1987). The influence of child preferred activities on autistic children's speech behavior. *Journal of Applied Behavioral Analysis, 20,* 243-252.
- Pierce, K., & Schreibman, L. (1997). Multiple peer use of pivotal response training to increase social behaviors of classmates with autism: results from trained and untrained peers. *Journal of Applied Behavioral Analysis, 30*, 157-160.
- 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.

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Middle/High School

- Koegel, R. L., Dyer, K., & Bell, L. K. (1987). The influence of child preferred activities on autistic children's speech behavior. *Journal of Applied Behavioral Analysis, 20,* 243-252.
- Koegel, R. L. & Frea, W. D. (1993). Treatment of social behavior in autism through the modification of pivotal social skills. *Journal of Applied Behavior Analysis, 26*, 369-377.