

Module: Naturalistic Intervention

Overview of Naturalistic Intervention

Franzone, E. (2009). *Overview of naturalistic Intervention*. Madison, WI: National Professional Development Center on Autism Spectrum Disorders, Waisman Center, University of Wisconsin.

Naturalistic intervention is a collection of practices including environmental arrangement, interaction techniques, and strategies based on applied behavior analysis principles. These practices are designed to encourage specific target behaviors based on learners' interests by building more complex skills that are naturally reinforcing and appropriate to the interaction.

Evidence

Naturalistic intervention meets the evidence-base criteria with eight single-subject and two randomized group design studies, demonstrating its effectiveness for promoting communication and social skills for learners at the preschool, elementary school, and middle/high school levels.

With what ages is naturalistic intervention effective?

Naturalistic intervention can be used effectively with learners with ASD regardless of cognitive level and/or expressive language skills. The evidence base shows that naturalistic intervention is effective for learners at the preschool, elementary school, and middle/high school levels.

What skills or intervention goals can be addressed by naturalistic intervention?

The evidence base demonstrates that naturalistic intervention can be used to facilitate communication and social skills, which may include things like expressive vocabulary, speech intelligibility, use of gesture, shared attention, and turn-taking.

In what settings can naturalistic intervention be effectively used?

By definition, naturalistic intervention relies on materials and an environment that is reflective of the learner's interests and natural environment. It may be used in school, home, or community settings.

Evidence Base

The studies cited in this section provide the basis upon which this practice was determined to meet the NPDC on ASD's criteria as an evidence-based practice. This list is not exhaustive and other quality studies may exist but were not found in our search.

Preschool

Ingersoll, B., Lewis, E., & Kroman, E. (2007). Teaching the imitation and spontaneous use of descriptive gestures in young children with autism using a naturalistic behavioral intervention. *Journal of Autism and Developmental Disorders*, 37, 1446-1456.

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- Koegel, R. L., Camarata, S., Koegel, L. K., Ben-Tall, A., & Smith, A. E. (1998). Increasing speech intelligibility in children with autism. *Journal of Autism and Developmental Disorders, 28*(3), 241-251.
- McGee, G. G., Almeida, M. C., Sulzer-Azaroff, B., & Feldman, R. S. (1992). Promoting reciprocal teaching via peer incidental teaching. *Journal of Applied Behavior Analysis, 25*, 117-126.
- Yoder, P., & Stone, W. L. (2006). A randomized comparison of the effect of two prelinguistic communication interventions on the acquisition of spoken communication in preschoolers with ASD. *Journal of Speech, Language, and Hearing Research, 49*, 698-711.

Elementary

- Charlop, M. H., Schreibman, L., & Thibodeau, M. G. (1985). Increasing spontaneous verbal responding in autistic children using a time delay procedure. *Journal of Applied Behavior Analysis, 18*(2), 155-166.
- Charlop, M. H., & Walsh, M. E. (1986). Increasing autistic children's spontaneous verbalizations of affection: An assessment of time delay and peer modeling procedures. *Journal of Applied Behavior Analysis, 19*(3), 307-314.
- Charlop, M. H., & Trasowech, J. E. (1991). Increasing autistic children's daily spontaneous speech. *Journal of Applied Behavior Analysis, 24*(4), 747-761.
- Koegel, R. L., Camarata, S., Koegel, L. K., Ben-Tall, A., & Smith, A. E. (1998). Increasing speech intelligibility in children with autism. *Journal of Autism and Developmental Disorders, 28*(3), 241-251.
- Laski, K. E., Charlop, M. H., & Schreibman, L. (1988). Training parents to use the natural language paradigm to increase their autistic children's speech. *Journal of Applied Behavior Analysis, 2*(4), 391-400.
- McGee, G. G., Krantz, P. J., & McClannahan, L. E. (1985). The facilitative effects of incidental teaching on preposition use by autistic children. *Journal of Applied Behavior Analysis, 18*, 17-31.

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Middle/High

Hamilton, B. L., & Snell, M. E. (1993). Using the milieu approach to increase spontaneous communication book use across environments by an adolescent with autism. *Augmentative and Alternative Communication, 9*, 259-272.

Selected Additional References

Hancock, T. B., & Kaiser, A. P. (2002). The effects of trainer-implemented enhanced milieu intervention on the social communication of children with autism. *Topics in Early Childhood Special Education, 22*(1), 39-54.

Hancock, T. B. & Kaiser, A. P. (2006). Enhanced milieu teaching. In McCauley R. J. & Fey, M. E. (Ed.), *Treatment of language disorders in children* (pp. 203-229). Baltimore: Paul H. Brooks Publishing.

Hwang, B., & Hughes, C. (2000). The effects of social interactive training on early social communicative skills of children with autism. *Journal of Autism and Developmental Disorders, 30*(4), 331-343.

Ingenmey, R., & Van Houten, R. (1991). Using time delay to promote spontaneous speech in an autistic child. *Journal of Applied Behavior Analysis, 24*(3), 591-596.

Kaiser, A. P., Hancock, T. B., & Nietfeld, J. P. (2000). The effects of parent-implemented enhanced milieu intervention on the social communication of children who have autism. *Early Education and Development, 11*(4), 423-446.

Koegel, R. L., O'Dell, M. C., & Koegel, L. K. (1987). A natural language intervention paradigm for nonverbal autistic children. *Journal of Autism and Developmental Disorders, 17* (2), 187-200.

Matson, J. L., Sevin, J. A., Box, M. L., & Francis, K. L. (1993). An evaluation of two methods for increasing self-initiated verbalizations in autistic children. *Journal of Applied Behavior Analysis, 26*(3), 389-398.

Neef, N. A., Walters, J., & Egel, A. L. (1984). Establishing generative yes/no response in developmentally disabled children. *Journal of Applied Behavior Analysis, 17*(4), 453-460.

Wong, C. S., Kasari, C., Freeman, S., & Paparella, T.. (2007). The acquisition and generalization of joint attention and symbolic play skills in young children with autism. *Research and Practice for Persons with Severe Disabilities, 32*(2), 101-109.