

# Applied Behavioral Analysis

Efficacy Rating  
Level #1

## What is Applied Behavioral Analysis (ABA)?

- A systematic process of applying interventions based upon the principles of learning theory to improve socially significant behaviors
- Focuses on external and observable environmental events that affect people's behavior
- Utilizes objective data to determine the extent of the relationship between the method or procedure used and behavior change
- Teaches children to discriminate among many stimuli
- Supports children's learning "how to learn" or how to better access their learning environment
- Effectiveness of ABA is well-documented, with current research replicating prior studies.

## Key components of ABA interventions

- Focus on measurable units of behavior
- Problem, interfering behaviors are ignored, redirected, or discouraged through varied behavioral methods
- Hierarchical design used to determine skills to present and their order of presentation
- Programs are individualized to the student or group
- Setting: frequently begins in a one-to-one setting but can also be applied to small and large groups
- Scientific approach: data gathering should drive process from assessment throughout intervention and generalization

## ABA methods are used to support persons with autism in at least six ways:

- to increase behaviors (e.g., reinforcement procedures increase on-task behavior, or social interactions);
- to teach new skills (e.g., systematic instruction and reinforcement procedures teach functional life skills, communication skills, or social skills);
- to maintain behaviors (e.g., teaching self control and self-monitoring procedures to maintain and generalize job-related social skills);
- to generalize or to transfer behavior from one situation or response to another (e.g., from completing assignments in the resource room to performing as well in the mainstream classroom);
- to restrict or narrow conditions under which interfering behaviors occur (e.g., modifying the learning environment); and
- to reduce interfering behaviors (e.g., self injury or stereotypy).

## Interventions based upon Applied Behavioral Analysis

While many approaches to intervention can be delivered through an Applied Behavioral Analysis paradigm, several of the major approaches most frequently associated with ABA are Discrete Trial Learning, Verbal Behavior Training, Pivotal Response Training, Fluency-based instruction, shaping/chaining methods, and independent work schedules (e.g., TEACCH model).

Applied Behavioral Analysis is an evidenced-based method for increasing or decreasing behaviors.

## References for Applied Behavioral Analysis

### **Web Sites**

[www.asatonline.org/about\\_autism/about\\_autism.htm](http://www.asatonline.org/about_autism/about_autism.htm)

### **Journal Articles**

Anderson, S.R., Avery, D.L., Dipietro, E.K., Edwards, G.L. & Christian, W.P. (1987). Intensive home-based early intervention with autistic children. *Education and Treatment of Children*, 10, 352 - 366.

Baer, D., Wolf, M., & Risley, R. (1987). Some still-current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 20, 313 - 327.

Baglio, C., Benavidiz, D., Compton, L., Matson, J., Paclawskyj, T. (1996). Behavioral treatment of autistic persons: A review of research from 1980 to present. *Research in Developmental Disabilities*, 17, 433 - 465.

Bimbrauer, J. S. & Leach, D. J. (1993). The Murdoch early intervention program after 2 years. *Behaviour Change*, 10, 63 - 74.

Cooper, J.O., Heron, T.E., & Heward, W.L. (1987). *Applied Behavioral Analysis*. Columbus, OH: Merrill.

Fenske, E. C., Zalenski, S., Krantz, P. J. & McClannahan, L. E. (1985). Age at intervention and treatment outcome for autistic children in a comprehensive intervention program. *Analysis and Intervention in Developmental Disabilities*, 5, 49 - 58.

Foxx, R. M. (1982). *Decreasing behaviors of persons with severe retardation and autism*. Champaign, IL: Research Press.

Horner, R., O'Neill, R., & Flannery, K. (1993). Building effective behavior support plans from functional assessment information. In M. Snell (Ed.). *Instruction of persons with severe handicaps*, 4th ed. (pp. 184 - 214). Columbus, OH: Merrill.

Horner, R., Vaughn, B., Day, H. & Ard, F. (1996). The relationship between setting events and problem behavior. In L. K. Koegel, R. Koegel & G. Dunlap (Eds.). *Positive behavioral support: Including people with difficult behavior in the community* (pp. 381 - 402). Baltimore, MD: Paul Brookes.

Jacobson, J. W. (2000). Early intensive behavioral intervention: Emergence of a consumer-driven service model. *The Behavior Analyst*, 23, 149 – 171.

Koegel, L., Koegel, R. & Dunlap, G. (1996). *Positive behavioral support*. Baltimore, MD: Paul Brookes.

Lovaas, O. I., (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology*, 55, 3 - 9.

Lovaas, O. I. (1993). *Teaching developmentally disabled children: The me book*. Austin, TX: Pro-Ed.

Matson, J. L., Benavidez, D. A., Compton, L. S., Poacławskyj, T., & Baglio, C. (1996). Behavioral treatment of autistic persons: A review of research from 1980 to the present. *Research in Developmental Disabilities*, 17, 433-465.

Maurice, C., Green, G. & Luce, S. (1996). *Behavioral intervention for young children with autism*. Austin, TX: Pro-Ed.

Metz, B., Mullick, J.A. & Buttler, E. M. (2005). Autism: A late 20<sup>th</sup>-century fad magnet. In J. W. Jacobson, R. M. Foxx, and J.A. Mulick (Eds.). *Controversial therapies for developmental disabilities: Fad, fashion, and science in professional practice*. (pp. 237 – 263). New Jersey, Lawrence Erlbaum Associates.

Sulzer-Azaroff, B. & Mayer, R. (1991). *Behavior analysis for lasting change*. Fort Worth, TX: Holt, Reinhart & Winston, Inc.

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