

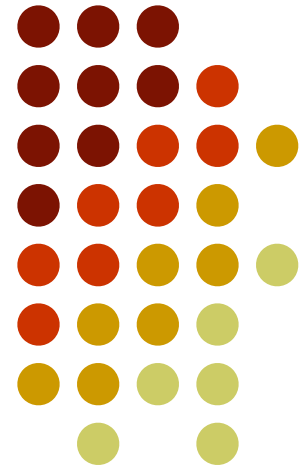
Applied Behavior Analysis Interventions for Autism: Summaries of Evidence

Gina Green, PhD, BCBA-D

Association of



*Professional
Behavior Analysts*
www.apbahome.net



Scientific evidence: Early, intensive, comprehensive ABA intervention for autism



- Multiple group-design studies of comprehensive ABA intervention for children with autism ages 2 -8 years have been published in peer-reviewed journals
 - Many studies on Lovaas/UCLA model
 - Several studies on other broad-based ABA models
 - None on “Verbal Behavior,” all-”naturalistic,” or other ABA models
- Several meta-analyses found early intensive ABA intervention (25+ hrs/wk, 1 – 4 yrs) overseen by professional behavior analysts produced substantially larger improvements than less intensive ABA, eclectic (mixed-method) intervention (intensive or not), and typical early intervention services

Scientific evidence: Early, intensive, comprehensive ABA intervention for autism



- **Strong evidence:** Mega-analysis of published studies by Eldevik et al., 2010, *American Journal on Intellectual and Developmental Disabilities*, 115 (5).
 - **Included only studies in which treatment group got intervention with defining features of early intensive ABA**
 - Analyzed **individual participant data** from 16 studies:
 - 309 children who received ABA intervention
 - 39 children who received comparison eclectic interventions
 - 105 children in control groups who received standard services
 - Found ABA intervention of 36+ hrs/wk, ≥ 2 yrs was required to produce reliable gains on measures of cognitive and adaptive skills (defined as +27 and +21 points, respectively)
 - Most children who made smaller gains nonetheless had clinically significant improvements
 - Effect sizes for ABA were comparable to those found for psychological and medical treatments for depression, OCD, bulimia

Scientific evidence: Focused ABA interventions for autism



- Hundreds of published behavior analytic controlled clinical trials document efficacy of a wide array of ABA interventions for building important skills in people with autism and related disorders *of all ages*, such as
 - “Learning to learn” skills
 - Communication skills
 - Social skills
 - Play and leisure skills
 - Hygiene and self-care skills
 - Personal safety skills
 - Eating a healthy diet
 - Sleeping
 - Cooperating with medical and dental procedures

Scientific evidence: Focused ABA interventions for autism



- ABA interventions have also proved effective for improving behaviors that directly jeopardize the health and welfare of people with autism and related disorders *of all ages*, such as
 - Self-injurious behaviors
 - Property destruction
 - Pica (ingesting inedible items)
 - Aggression
 - Elopement (wandering)
 - Obsessive behaviors
 - Hyperactivity
 - Fearful behaviors

Scientific evidence: Focused ABA interventions for autism



- Recent comprehensive reviews of the full range of relevant studies found that multiple focused and comprehensive ABA interventions for autism meet scientific criteria for evidence-based interventions. See
 - National Autism Center National Standards Project Phase 2 (2015) – report available at <http://www.nationalautismcenter.org/national-standards-project/phase-2/>
 - National Professional Development Center for ASD 2014 report on evidence-based practices – available at <http://autismpdc.fpg.unc.edu/node/21>

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