



The Heart of ABA and Autism: Personality, Individuality, and Relationships

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Fairport, May, 2007



Introduction to CARD

- Founded in Los Angeles in 1990 by Dr. Doreen Granpeesheh
- Mission: give access to top-quality behavioral intervention to the maximum number of children with autism possible
- 15 locations in U.S., including 2 in NY state
- 3 international locations: England, New Zealand, and Australia



DLS

- Distinguished Lecturer Series at CARD: free seminars offered to the community in order to disseminate information that will be useful to parents and professionals
- Casual discussion seminar format: raise your hand and ask questions whenever you like



Tonight's Purpose

- Describe how good ABA programs address the uniqueness and interpersonal relationships of individuals with autism
 - Overview ABA
 - Overview research on ABA and autism
 - Address several myths regarding ABA and autism with examples



ABA Overview

- What is ABA?
 - Using what a kid likes to teach him/her
- More than 100 years of research in psychology has shown that positive reinforcement is the central factor that is responsible for learning in all organisms
- Positive reinforcement is getting something you like as a consequence for doing something – *that motivates you to do that thing more in the future*



ABA Overview

- What types of things can be positively reinforcing?
 - It's different for every person
 - It completely depends on the child
- What kinds of behavior can be reinforced?
 - Just about anything you can do
 - Behavior includes motor actions, thinking, planning, relating, talking, playing, etc.



ABA Overview

- What else do you have to do to implement a comprehensive ABA program for a child with autism?
- Implement the other teaching procedures which have been researched in hundreds of research articles
 - Prompting / Prompt-fading
 - Discrimination training
 - Generalization training
 - Chaining
 - Shaping
 - Discrete trial training
 - Natural environment training
- ABA is not a procedure, it's an individualized analysis of each student, based on scientific principles of learning and motivation



Research on ABA for Autism

- Two basic types of ABA research:
 1. Large-scale outcome studies
 - Groups of children (usually 10 or more)
 - Comprehensive treatment (all skill domains addressed)
 - Long-term treatment (1 year or more)
 2. Small-scale treatment studies
 - Small groups of children (usually 1-3)
 - Focused treatment (usually teaching one or two skills)
 - Short-term (usually one or two months)



Large-Scale Outcome Research on ABA for Autism

- *Lovaas (1987)*: 40 hours for 3 years produced typical educational functioning and IQ for 47% of children
 - *McEachin (1993)*: gains maintained at age 11.5
- *Eldevick (2006)*: 12 hours for 2 years is not enough
- *Sallows (2005)*: 30 hours for 2 years produced typical educational functioning and IQ for 47% of children



Large-Scale Outcome Research on ABA for Autism

- *Howard (2005)*: 30 hours of ABA for 14 months produced substantial gains for preschoolers
- *Cohen (2006)*: 30 hours of ABA for 2 years resulted in nearly one third of the children succeeding in typical education
- *Eikeseth (2007)*: 30 hours of ABA for slightly older kids (up to 7) produced large gains



Large-Scale Outcome Research on ABA for Autism

- Conclusions of large-scale outcome research
 - Every published study demonstrated very substantial improvements, relative to special education and/or “eclectic” treatment
 - Intensity matters: at least 30 hours per week for more than a year produces best outcomes
 - Several studies across several different groups of researchers have replicated the same results



Small-Scale Research on ABA for Autism

- Matson (1996) review of all scientific studies on ABA and autism
 - Found 251 research articles in scientific journals
- More recently groups doing reviews have estimated the total number of scientific research articles on ABA and autism to be around 1000

<http://www.nationalautismcenter.org/about/development.php>



Small-Scale Research on ABA for Autism

- Small-scale research has demonstrated that just about any child's skills can be improved, one step at a time, through careful use of positive reinforcement, prompting, etc.
 - Social skills
 - Language
 - Independent living
 - Decreasing behavior problems
 - Academics



Onto Some Myths Regarding ABA and Autism...



Myths Regarding ABA and Autism

- *“ABA doesn’t respect the individuality of children with autism?”*
 - How does one respect individuality?
 - Starts with knowing what makes that person unique
 - What they care about
 - What they like
 - What they want
 - Preference assessment: 25 years of research on preference assessment with people with autism
 - Different procedures, depending on prerequisite skills
 - Preference predicts reinforcement value
 - Variability improves reinforcement value
 - Parent/staff report
 - Difficulty of task influences reinforcement value



Criticisms

- Has to be done at the table
 - False
 - CAN be done at the table but tables have nothing to do with positive reinforcement and the rest of the procedures our science has studied for decades



Criticisms

- ABA only produces rote behavior
 - False
 - 70 years of research on stimulus control and generalization tells us exactly how to get rote learning when we want it and how to get natural, generalized learning when we want it
 - Primary way to get flexible learning is to teach many, many different examples across many teachers and many settings and many different instructions



Criticisms

- ABA doesn't involve the family as a central component
 - False
 - Early ABA research showed that children with autism have better outcomes and skills maintain longer when families are involved in treatment
 - All good ABA programs involve parent training and parent participation



Myths Regarding ABA and Autism

- *“ABA doesn’t address the therapist-child relationship”*
 - Rapport
 - First step in any good ABA program is to establish a good rapport between the child and therapists
 - Play
 - Engage the child in activities he/she prefers
 - Have fun
 - Give lots of positive reinforcement for free



Myths Regarding ABA and Autism

- *“ABA doesn’t follow the child’s lead – it’s always the therapist in control of the interaction”*
 - Incidental teaching (Hart & Risley, 1980)
 - Teach in the natural environment
 - Wait for child to initiate
 - Using prompting, reinforcement, and other proven behavioral teaching procedures
 - Other ABA teaching procedures based on the same approach
 - Natural Environment Training
 - Pivotal Response Training
 - Natural Language Paradigm
 - Enhanced Milieu Teaching



Child-Initiated Video Sample



Child-Initiated Learning

- Verbal Behavior (Skinner, 1957)
- Behavioral analysis of language
 - Mand: a person requests something when HE/SHE wants it
 - Tact: a person comments on something when they see it and they are interested in it
 - Pure mands and tacts are NOT prompted by a teacher or anyone else – they are child-initiated
 - All comprehensive ABA programs take mands and tacts into consideration in their teaching



Myths Regarding ABA and Autism

- *“ABA only teaches children to respond when told to, not to be truly independent”*
 - Self-monitoring
 - Academics
 - Conversation skills
 - Independent living skills
 - Independent play skills



Criticisms

- **Quote from the website of a popular relationship-based intervention for autism:**
 - ***“MYTH: Children with autistic spectrum disorders can’t learn the fundamentals of relating, communicating and thinking, so the best you can do is try to teach them to change their behaviors.”***



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- Relating, communicating, and understanding socially are things that people *DO*, they are skills, they are behaviors
 - How do we teach someone to *DO* something?
 - Use scientifically validated principles of learning to guide curriculum construction



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- Social cognition
 - Perspective-taking
 - Other peoples' knowledge
 - Other peoples' emotions
 - Thinking and problem solving



- Perspective-taking
 - Visual perspective-taking video clip



- Social cognition
 - Socially appropriate deception: lying in joke telling video



Conclusion

- ABA is supported by hundreds of scientific studies
- ABA is only as rigid as you make it
 - ABA is defined as using positive reinforcement and other teaching procedures to systematically teach what you want to teach
 - ABA is not just discrete trial – discrete trial is one of many scientifically validated ABA teaching procedures