


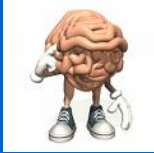
The Causes of Autism

- “Refrigerator Moms”
- Being Jewish
- Serotonin Levels
- Abnormal Genes
- Leaky Gut
- Food Allergies
- Cosmic Rays
- MMR Vaccine (Thimerosal)



The Causes of Autism

- Lead Poisoning
- Television Watching
- Wireless Technology
- Chinese Power Stations
- Antenatal Ultrasound Scans
- iPod Batteries
- Rain
- Vinyl Floors



Why the Increase in PREVALENCE?

- Broadening of Diagnostic Criteria
- Elimination of Categories
- Recognizing Differential Diagnosis with MR
- More & Better Trained Diagnosticians
- Earlier Detection
- Media & Internet
- More Effective Intervention
- Don't Know, But.....

Diagnostic Features

Qualitative Impairment in Communication

Mute Delayed Echolalic Unusual Speech Patterns Initiate & Sustain Conversations

Qualitative Impairment in Social Interaction

Rejecting Joint Attention Initiate Social Contact Lack of Reciprocity Failure to Develop Friendships

Restrictive, Repetitive & Stereotyped Patterns of Behaviors, Interests & Activities

Motor Movements Object Preoccupation Restricted Interests Routines, Rituals & Inflexibility

• Old Criteria New Criteria

Critical Thinking


Observed Events:

1. Child Is Calm
2. Child Eats Candy
3. Child Becomes “Hyperactive”

Critical Thinking

Possible Interpretations:

1. Sugar Intake Caused “Hyperactivity”
2. Child Eats Candy During Fun and Unstructured Events (Halloween)
3. Child Rarely Eats Candy & Is Excited
4. Parents React Differently Because of Their Expectations
5. Child’s Behavior Actually Didn’t Change, But Parent Now Believes There Was Change
6. Coincidence--Correlation!





Correlation
DOES NOT
Imply Causation!!!

Dr. Piffer, 1971



Correlation is:



The Tool of the Devil!!!



- Children Raised in Homes With More Appliances Tend to Perform Better in School
- Cities that Have the Most Storks Have the Highest Pregnancy Rates
- People with Bigger Feet Are Better Readers
- ABA Results in Children Who Speak Robotically and Have Difficulty Generalizing Skills



What is ABA???

- **Behavior Analysis** is a Psychological Approach Developed in the Late 1800's to Increase the Understanding of Children, Adolescent and Adult Behavior
- **Applied** Behavior Analysis is the Application of Behavior Analysis to Help Improve Life
- It is Simply **OUTSTANDING** Teaching
- **Analysis:** Critical Thinking



John B. Watson Tabula Rasa

"Give me a dozen healthy infants, well-formed, and my own specified world to bring them up and I'll guarantee to take any one at random and train him to become any type of specialist I might select doctor, lawyer, merchant-chief, and yes, even beggar man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors."




LOVAAS (1987) & McEACHIN, SMITH & LOVAAS (1993)


- 38 Children Independently Diagnosed
- Began Treatment Before 4 Years Old
- 19 Children Received an **AVERAGE** of 40 Hours of **FORMAL, QUALITY** ABA Intervention Weekly
- 19 Children Received an **AVERAGE** of 10 Hours of **FORMAL, QUALITY** ABA Intervention Weekly & **Other Treatments**
- Received Intervention for 2 **OR MORE** Years
- Intervention Occurred at Home, **SCHOOL** and Community

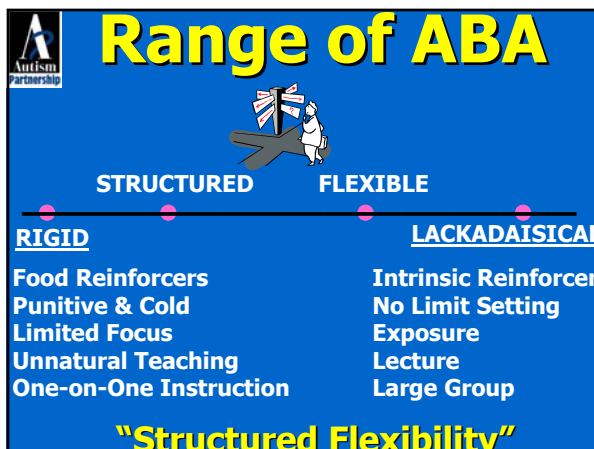
Autism Partnership Outcome Results

	"POOR"	"FAIR"	"BEST"
I.Q.:	Profound-Severe	Moderate-Mild	"Normal" Range
SCHOOL PLACEMENT:	Classes For Autism	Special Ed Other Than Autism	General Education Without Supports
DIAGNOSIS:	Autistic Disorder	Diagnosis Other Than Autistic Disorder	Indistinguishable
Avg 40 hrs & ABA Only	2	8	9
Avg 10 hrs & "Eclectic"	11	8	0
0 hrs & "Eclectic"	10	10	1

- ## Autism Partnership What's OUTSTANDING Teaching?
- 
- High Expectations, But Realistic
 - Powerful Motivators
 - Giving Clear and Accurate Feedback
 - Providing Assistance **AS NECESSARY**
 - **OBSESSIVELY SYSTEMATIC!!!**
 - Practice, Practice, Practice!
 - Adjusting Teaching Strategies Based Upon the Learner

- ## Autism Partnership Obsessively Systematic
- Break Skills into Small Learnable Parts
 - Incredibly Precise Timing
 - Develop Comprehensive Motivational Systems that will Eventually Facilitate Internalization
 - Continuous and On-Going Evaluation

- ## Autism Partnership What's OTSTANDING Teaching?
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- ## Autism Partnership Treatment Priorities
- Developing Powerful Reinforcers
 - Functional Behavior Assessment
 - Reduce Disruptive and Interfering Behaviors: Reactive & Proactive Plans
 - Concentration on "Learning HOW to Learn" Skills
 - Focus on Language
 - Emphasis on Social & Play



Reactive Plan

1. Provide "C" Reinforcer Every ___ Minutes for the **Absence of Disruptive** Behaviors
2. Disruptive Behaviors Result in the Least Amount of Attention **Necessary**
3. Disruptive Behaviors Result in the Loss of Opportunity for Reinforcement
4. Provide "A" Reinforcer Every _____ Times for the Presence of Appropriate Behavior



Proactive Plan

1. Teach Replacement Skills
2. Break Skills into Smaller Parts
3. Concentrated & Systematic Teaching



Learning How to Learn

- Sitting
- Giving Back Reinforcers
- Not Fidgeting or Grabbing
- Remaining Calm
- Paying Attention
- Responding to Instructions
- Learning From Feedback
- Learning From Prompts
- Deductive/Inductive Reasoning
- Making Inferences
- Waiting



Critical Thinking

Observed Events:

1. Child Exhibits Disruptive Behaviors & Has Limited Speech, Play and Social Skills
2. Child Begins Treatment
3. Child Appears To Improve



Critical Thinking

Possible Interpretations:

1. Treatment is Effective
2. Hope and Excitement
3. Child Receives More Attention
4. Increased Structure
5. Combination of Treatments
6. Change Facilitated Temporary Improvement
7. Biased Observations
8. Although Improvement, Not Significant



"Panaceas of the Week"

✓ = Research in Peer Reviewed Journals
 Myers, S.M. & Johnson, C.P. (2007), Management of Children with Autism Spectrum Disorders. American Academy of Pediatrics, 120 (5), 1162-1182.

- Peer Reviewed Journal**
- Reputable Journal**
- Independent Evaluation**
- Standardized & Valid Tests**
- Experimental Design**
- Statistical Significance**
- Generalized to Others**

"Panaceas of the Week"

✓ = Research in Peer Reviewed Journals

- ABA (Discrete Trial Teaching) ✓
- Acupuncture
- ADAM (Autistic Internet Interface)
- Allergy Treatments
- Aquatherapy
- Art Therapy
- Assisted Pig Therapy
- Auditory Integration Training
- Big Ear
- Blood Transfusions
- Blue Green Algae



- Bonding
- Brain Gym
- Brushing
- Chelation
- Chiropractic Manipulations
- Cow Protein Injections
- Discrete Trial Trainer
- DMG/B-6
- Dolphin Therapy
- Ear Earobics
- Electric Shock ✓



- Energy Therapy
- Equestrian Therapy
- Facilitated Communication
- Fast Forward (Halo)
- Feingold Diet
- Fenfluramine
- Flashlight Therapy
- Floor Time
- Gluten/Casein Free Diets
- Hippotherapy



- Hyperbolic
- Incidental Teaching (ABA) ✓
- Inclusion
- Ingestion of Worm Eggs
- Linda Mood Bell
- Links to Language
- LSD
- Miller Method
- Music Therapy
- Natural Language Paradigm (ABA) ✓
- Options



- Organic Fish Oil
- Patterning
- PECS (ABA) ✓
- Pivotal Response Training (ABA) ✓
- Play Therapy
- Prism Glasses Prozac
- Prozac
- Rapid Prompting Method
- RDI
- Reflexology



- Remote Healing
- Sacro-cranial Massage
- Sauna Treatment
- Sensory Integration
- Signing
- Social Stories
- Squeeze Box
- TEACCH
- Verbal Behavior (ABA) ✓
- Visual Therapy
- Womb Room





Critical Thinking

Observed Event:

1. Child is Out of Control!
2. Dr. Leaf's Famous Chocolate Therapy is Elegantly Implemented
3. Child Becomes Happy and Content



According to the Experts:

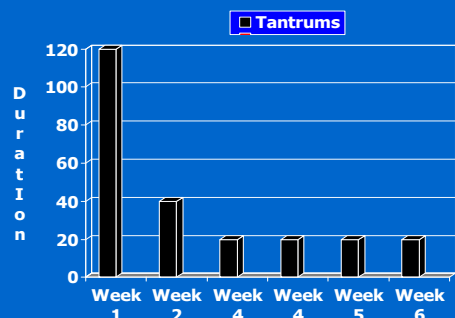
"Chocolate can affect the brain by causing the release of endorphins and other opiates that can help to reduce stress and lead to feelings of euphoria."

Dr. Daniele Piomelli
Neuroscience Institute

Dr. Eric Braverman
New York's PATH Medical



Dr. Leaf's Chocolate Therapy



Critical Thinking



Possible Interpretations:

1. Procedure Assisted Child in Organizing Sensory Input
2. Resolved the "Need" for Chocolate
3. Chocolate Stabilized Metabolic Deregulation
4. Child Was Distracted
5. Child Received Attention
6. Child Avoided Non-Preferred Activity
7. Served As Coping Strategy For Stress