


THE CASE AGAINST ECLECTICISM


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ECLECTICISM

Two most widely cited studies aimed at identifying Best Practice for Treatment and Education of children with ASD:

- Dawson and Osterling (1997)
- Prizant and Rubin (1999)



DAWSON & OSTERLING: TREATMENTS REVIEWED

- Douglas DDC (Rutgers)
- Health Sciences Center (Sally Rogers, U. Colo.)
- LEAP (Phil Strain)
- May Institute (Cape Cod)
- PCDI (Krantz & McClannahan)
- TEACCH (U No. Carolina)
- Walden Preschool (Emory U., Gail McGee)
- UCLA YAP (Ivar Lovaas)




CONCLUSIONS FROM BEST PRACTICE ARTICLES

- There are a wide variety of effective treatments.
- All research on autism treatments has flaws and limitations
- There is no evidence that any one approach is better than another
- There are common elements to all successful approaches
- Therefore “best practice” = Incorporate common elements of all these different treatments



COMMON ELEMENTS OF TREATMENT PROGRAMS

- Curriculum Covers Important Basic Skills
 - attending; imitation; language; toy play; social interaction
- First Establish Core Skills in Highly Structured Settings, Then Generalize to Natural Environments
- Provide Predictability and Routine
- Analytic Approach to Behavior
- Teach Classroom Survival Skills
- Family Involvement




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- Although they did not report on it, we are confident that the vast majority of staff were female in all the studies
 - Therefore best practice should include not hiring male staff???




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CURB APPEAL


- More is better: Obviously one size cannot fit all
- Blend approaches to customize mix for each student
- Capture best elements of each approach






WHAT IF THEIR CONCLUSIONS ARE FLAWED?

- Is there really “no evidence that any one approach is better than another” ???




QUALITY OF OUTCOMES

- Dawson and Osterling (1997) deemed all interventions as equally deserving of merit despite enormous discrepancy in quality of outcomes
 - E.g., maintaining community placement (despite still displaying disruptive behaviors and profound skill deficits)
- Vs.
- Intellectual functioning increasing to age typical levels; performing grade level work without support in general education classes



QUALITY OF EVIDENCE

- Dawson and Osterling (1997) did not take into account quality of evidence in coming to conclusion that all interventions are equal
- Other reviews that evaluated quality of evidence have come to a different conclusion
 - U.S. Surgeon General Report (2000). Chapter 3.
 - National Research Council. (2001). Educating Children with Autism
 - New York State Department of Health (1999). Clinical practice guideline



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- Dawson and Osterling (1997) and Prizant and Rubin (1999) were not empirical studies
 - Did not directly compare various interventions
 - No objective data to support their theory



THE CASE AGAINST ECLECTICISM

Then what really is “best practice”?

- If all treatments **DO NOT** produce the same results, then you should go with the one with the best track record
- When there is an intervention that produces superior results, the differences must be due to what is **UNIQUE** in the procedure, not what it shares in common with less effective procedures



EVIDENCE FOR EFFECTIVENESS OF ABA

- Anderson, Avery, DiPietro, et al. (1987)
- Birnbrauer, J.S., & Leach, D.J. (1993)
- Cohen, H., Amerine-Dickens, M., & Smith, T. (2006)
- Eikeseth, S., Smith, T., & Eldevik, S. (2002)
- Fenske, E.C., Zalski, S., Krantz, P.J., McClannahan, L.E. (1985)
- Handleman, J.S., Harris, et al. (1991)
- Harris, S.L., & Handleman, J.S., (1994)




EVIDENCE FOR EFFECTIVENESS OF ABA

- Lovaas, O.I., Koegel, R. L., Simmons, J. Q., & Long, J. (1973)
- Lovaas, O.I. (1987)
- McEachin, J.J., Smith, T., & Lovaas, O.I. (1993)
- Reichow & Wolery, 2009
- Sallows, G.O, and Graupner, T. D. (2005)
- Smith, Eikeseth, Klevstrand & Lovaas (1997).
- Smith, T., Groen., A., & Wynn, J.W. (2000)
- Weiss, M. J. (1999)




STUDIES CONDUCTED IN U.K.

- Howlin & Magiatti (2009)
- Magiati, Charman & Howlin (2007).
- Remington, Hastings, Kovshoff, degli'Espinosa, Jahr, Brown, Alsford, Lemaic & Ward (2007)




CASE STUDIES

- Leaf, Taubman, McEachin et. al. (2011)
- Perry, Cohen, & DeCarlo R. (1995)
- Fein, Barton, Eigsti, et al. (2013). Optimal outcome in individuals with a history of autism.




WHAT IS WRONG WITH BLENDING APPROACHES?

ECLECTIC	SPECIALIZED
Jack of all trades, master of none	Develop focused expertise
Rudderless ship	Cohesiveness provides clear direction
Dilution: Noneffective components can diminish impact of important elements	Retains only the unique and essential elements
Promotes dabbling and "shopping"	All energy is devoted to what really makes a difference
Distills Existing Approaches. (What gets lost in translation?)	Produces innovation




WHAT IS WRONG WITH BLENDING APPROACHES?

- AMPLIFICATION
- COLLABORATION
- DILUTION
- POLLUTION




AMPLIFICATION

- Amplification: The synthesis of two (or more) elements that produces exponentially more change than the elements alone.
 - Can be true of element that by itself has no discernible impact
- Example: Teaching Receptive and Expressive Language
 - Flexible Prompt fading alone is only slightly better than scripted prompting protocols
 - Teacher discretion of item order and location is about the same as scripted.
 - But early research findings suggest that when FPF and discretion are combined there can be enormous improvement in rate of acquisition.




COLLABORATION

- Interventions that are compatible and complementary
 - Skill-based O.T.
 - Speech Therapy that is behaviorally based




DILUTION

- Non-evidence based Interventions that take time and energy away from what really works
 - GFCF diet
 - Music therapy




POLLUTION

- Non-evidence based interventions that are antithetical and potentially undermines what you are trying to accomplish
 - Floortime
 - Options (“Sonrise”)
 - Sensory Integration





How Do We Make a Choice?

- Be an Informed Consumer
- Critical Thinking



Critical Thinking





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




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




How Do We Make a Choice?

- Be an Informed Consumer
- Critical Thinking
- Be Guided by Objective Data
- Look at Long Term Outcomes




EVALUATING OUTCOMES

- We want our children to be healthy happy and productive
- What is Effective: We need to identify what works and what doesn't work.
- What is Efficient: Time is Precious. Resources are limited.
- Our knowledge of HOW TO IMPROVE BEHAVIOR AND EFFECTIVELY TEACH NEEDED SKILLS has ONLY advanced through application of the scientific method.




EVALUATING OUTCOMES

- If we do not objectively assess outcomes we can easily be fooled
 - If you pay \$10,000 for auditory integration training you are going to see improvement in behavior.



EVALUATING OUTCOMES


- If we do not objectively assess outcomes we can easily be fooled
 - If you pay \$10,000 for auditory integration training you are going to see improvement in behavior.
- It's easy to be fooled into accepting false beliefs.



PRIZANT & WETHERBY 1998

Social Pragmatic Approach =


- Exploit natural opportunities to facilitate language
- Non-critical toward child's communication efforts
- Less directive
- Adjusting language input (complexity) to fit the child
- Communication temptations; therapeutic sabotage
- Learning is Transactional and Affectively Based



PRIZANT & WETHERBY 1998


Traditional DTT =

- Rigid
- Taught in unnatural settings
- Treatment for “low functioning” children
- Narrow curriculum
- Does not promote “natural” language
- Does not promote socialization
- Reduces opportunities for generalization
- Produces rote responding




How is ABA Similar

- Respects Developmental Model
 - Skills Progress Cumulatively
- Building Interpersonal Relationships
- Development of Communication
- Looks at whole person
- Aims for better quality of life



How is ABA Different?

- Intensive
 - Not just 30-40 hours; It is a mindset
 - Building fluency = drills
 - Requires active responding
- Directive
 - Willing to push hard
 - Can't wait for child to do at own pace
 - Make decisions on behalf of child
- Comprehensive
 - Not just verbal behavior or relationship building



How is ABA Different?

- Analytic Method
 - Observable, measurable, objective
 - Understanding how behavior is related to environmental events and history
 - Finding relationship of antecedents and consequences to behavior
 - Hypothesize, Test, Revise



COMPARATIVE ANALYSIS: ABA vs. ECLECTIC

- Eikeseth, Smith, Jahr & Eldevick (2002 & 2007)
- Howard, Sparkman, Cohen, Green & Stanislaw (2005); Howard, Stanislaw, Green, Sparkman & Cohen (2014)



How Do We Make a Choice?

- Don't Assume That Combining Approaches Will Yield Better Results Than Any One Individual Approach: More Is Not Necessarily Better
- Choose a Guiding Framework
- Maintain Cohesiveness of Approach
- Concentrate on the Interventions That Actually Make a Difference