

ABA and DIR/Floortime: Compatible or Incompatible?

Sweden ABA Conference 2017

Robert K. Ross, Ed.D., BCBA-D

Beacon ABA Services of MA & CT

THANK YOU



House Keeping Issues

- **A little about my presentation style**
- **What if you have a question?**
- **Tone of this presentation**
- **Is this my opinion?**
- **Why am I doing this presentation?**

Comparison of ABA (EIBI) and DIR/Floortime

- Philosophical basis for these treatment interventions
- Assessment methods used
- Intervention Goals: How are they developed?
- How are the treatments “operationalized”
 - Descriptions of the procedures
- Potential procedural conflicts impacting student learning

EIBI Overview

- Early Intensive Behavioral Intervention-Based upon the science of Applied Behavior Analysis
 - Purpose of science: To achieve a thorough understanding of the phenomena under study
 - Methods:
 - Description: Collection of objective facts (reliable)
 - Prediction: Accurate facts allow for correct predictions to be made about behavior (not random)
 - Control: We can alter variables to affect rates of behavior (functional relations)

Early Intensive Behavioral Intervention (EIBI)

- Also known as: ABA, the Lovaas method, DTT, IBI, IBT, and some names I cannot mention
- Components:
 - Behavioral Emphasis (ABA) : Procedures
 - 1:1 Instruction
 - Comprehensiveness
 - Integration
 - Individualized treatment interventions
 - Family participation
 - Intensity: typically 25-40 hours/week

DIR/Floortime Overview

- D = Functional Developmental levels
- I = Individual differences in sensory processing
- R = Relationship based
- These three elements are “operationalized” through the implementation of Floortime
- “A process or concept, through which therapists... make a special effort to tailor interactions to the child at his unique functional developmental level and within the context of his processing differences”
Greenspan & Weider (2005)

What is the theoretical basis for DIR/Floortime?

- According to Greenspan & Weider, 2005
 - 6 basic developmental skills, or milestones lay the foundation for all of our learning
 - In children with ASD “emotional milestones were missed in the child’s early development”
 - “Building these foundations helps children overcome their symptoms more effectively than simply trying to change these symptoms alone”

The Six Developmental Milestones

1. Shared Attention and Regulation
2. Engagement and Relating
3. Purposeful Emotional Interaction
4. Social Problem Solving
5. Creating Ideas
6. Connecting Ideas Together, Thinking Logically

Floortime DVD Training Guide, Greenspan & Weider,
2005

Differences in Philosophical Approach

DIR/Floortime:

- Starts with an hypothesis of cause (missed milestones) and implements treatment interventions (Floortime) to remediate this hypothesized* cause.
 - If the treatment interventions are not effective, the cause is still held to be true
 - Disconfirming data are not considered evidence that the underlying hypothesis is incorrect

* NRC report of the Committee on Educational interventions for Children with Autism, 2001 (pp 68)

EIBI:

- Starts with assessments and analyses
 - to determine variables that affect behavior(s) of concern
- Once these variables are identified, they are used to develop intervention procedures consistent with basic principles of learning to build adaptive skills and reduce problem behavior
 - Assessment first & treatment is developed based upon evidence of effect
 - If the treatment procedures are not effective, the interventions are modified until positive effects occur.
 - Disconfirming data result in modification of hypothesis

Why does Autism Happen? DIR

- Children require the specific and “appropriate emotional experiences” in their early development. ¹
- When their early environments do not provide these “nurturing interactions” we see the development of disorders of relatedness. ²
- The result of the ongoing and increasing withdrawal is a lack of opportunity to learn appropriate behavior and skills from other people.³

1. , 2., & 3., Greenspan & Weider 2005 Floortime DVD Training Guide

Cause 1

Cause 2

Cause 3

Cause 4

Perspective Differences

- Is autism a neurologically based disorder of unknown etiology?
- Or
- A disorder of “relatedness” that occurs as a function of the lack of critical emotional experiences in early development?

Are Philosophical Differences Important?

- DIR/Floortime & ABA
Differ dramatically on why Autism happens?
- Assessment procedures, Goals &
Interventions follow from the hypothesis of
etiology

Assessment

- DIR/Floortime: “Measurement” is related to hypothesis of cause
 - DIR/Floortime Developmental Milestones
 - Functional Emotional Assessment Scale (FEAS)
- EIBI: Measurement related to performance of peers and skill sequences
 - Norm referenced curricula
 - Developmental Sequence curricula

Goals

- How do the two approaches differ with regard to the types of goals to be addressed in the context of therapy/instruction?
- Shaped by philosophy

DIR/Floortime: General goals

- Mastery of both emotional and cognitive abilities at each of nine stages of functional emotional development *
- 1) Regulation and interest in the world;
 - 2) Engaging and relating;
 - 3) Intentionality and two-way communication;
 - 4) Social problem solving & Shared social problem solving;
 - 5) Creating symbols & using words & ideas;
 - 6) Emotional thinking, logic & a sense of reality;
 - 7) Multi causal & triangular thinking;
 - 8) Gray area, emotionally differentiated thinking;
 - 9) A growing sense of self and reflection on an internal standard

* Engaging Autism , Greenspan & Weider, 2006

DIR/Floortime: Specific goals

- Neither the Floortime DVD Training Series (and accompanying manual) nor “Engaging Autism” the textbook on using the Floortime approach, specify explicit measurable goals to be addressed
 - Broad goal areas that are not operationally defined and subject to significant variability in interpretation are described e.g.,
 - “Open and close circles of communication”: Build on the child’s interest and then inspire the child to, in turn, build on what you have done or said”
 - “Follow the child’s lead”

EIBI: General goals

- Improve the child's level of adaptive functioning compared to typical peers.
- Developed based upon norm and criterion referenced assessments
- Status on level of functioning in skill areas is objectively quantifiable and subject to independent confirmation

EIBI: Specific goals

- Operationally defined and measurable
- Goals relate directly to empirically identified skill deficits and/or behavioral excesses
 - Not hypothesized missing levels or sensory processing dysfunction
- Data are collected, analyzed and used to modify instruction where progress is not being achieved

How are the treatments
operationalized?

“The cornerstone of the DIR/Floortime treatment program”

Floortime (Three elements):

- Parents do Floortime with their child creating the kinds of experiences (*undefined*) that promote mastery of the developmental milestones
- Speech, Occupational and physical therapist, educators, and or psychologists work with the child using specialized techniques informed by Floortime principles to deal with the child’s specific challenges and promote development
- Parents work on their own responses and styles of relating with regard to the different milestones in order to make their interactions with their child most helpful and create a family pattern that supports emotional and intellectual growth in all family members

Floortime

- Two goals: (According to Engaging Autism, but not in the DVD Training Manual)
 - Follow the Child's Lead: Harness their natural interests, join him in his own world
 - No specific procedures: Any action can be construed as FCL, including repeating stereotyped behavior & imitating aggression (pg 70 Engaging Autism , Greenspan & Weider, 2006)
 - Bring the child into a shared world: Not operationally defined.
 - “For a variety of reasons, **a child may have elected** to be self-absorbed, aimless, or seemingly withdrawn into her own world” (pg. 179, Engaging Autism , Greenspan & Weider, 2006)

D is for Developmental (sort of)

- “Understanding where your child is in his emotional development is critical to planning a treatment program”
 - Greenspan & Weider (2005). Floortime DVD Training Guide (pg. 1)
- So the developmental level of child will impact how therapy is conducted.

Gary: Age 22 months

- Expressive Language:
 - 1-2 words mostly one word utterances
- Receptive Language: 2-3 words
 - Understands simple concrete object labels and actions
 - Does not respond to most verbal questions with a vocal response (@ 99% non-response rate)
 - Never observed to answer an open ended question

Alex 2 years old

- Expressive Language:
 - 1-2 words mostly object naming
- Receptive Language: 2-3 words
 - Understands simple concrete object labels and actions
 - Does not respond to most verbal questions with a vocal response
 - Never observed to answer an open ended question

Language Level of Instruction

- [Clip 1](#)
- [Clip 2](#)
- [Clip 3](#)

Potential effects on EIBI program

- Practice non-responding to questions
 - Systematic Ignore Language Practice (SILP): Making language an irrelevant set of sounds
 - Poor responding in instructional sessions where you are trying to establish consistent responding to “language” instructions
 - Non-responding often produces more interaction from adults (longer MLU, and qualitative changes): May directly reinforce non-responding
 - Decrease in performance on previously established responses
 - Slower acquisition or failure to acquire responding

Remember: Philosophy Affects how Treatment Interventions are Implemented

- “Floortime is not about doing a right or wrong thing it’s a process in which you and your child are always learning” (pg 181, Engaging Autism, Greenspan & Weider, 2006)

Video of DIR/Floortime

- Changing behavioral expectations
 - [Clip 1](#)
- Lack of correspondence between prompts and actions of Gary
 - [Clip](#)

Reinforce Behavioral Communication?

- [Clip 1](#)
- [Clip 2](#)

Possible effects on EIBI program

- Reinforcement of behavioral communication: (reach, grab and take)
 - Increase in grabbing and decrease in use of PECS or vocal communication procedures being taught
 - Increase in aggression when effective communication system in DIR/Floortime sessions is not reinforced in EIBI sessions
 - More SILP

“I” is for

- Individual differences in sensory processing
 - Hypothetically, this would result in the parent or therapist presenting visual, auditory, tactile and other sensory stimuli in carefully structured ways the child based on some assessment of “sensory processing”.
 - Loud, quiet, few words/many, guidelines for touch (soft hard, lots little), etc.
- No evidence of this principle being followed

“R” is for

- Relationship Based:
- This actually refers to using DIR/Floortime to build the relationships of the primary caregivers and the child (not the therapists)
 - Pg 1. DIR/Floortime DVD Training Guide
 - You may have been under the impression that this referred to the relationship between the therapist and the child
- What relationship is being built by SILP?

Analysis

- [Gary 1](#)
- [Gary 2](#)
- [Gary 3](#)
- [Prognosis](#)

DIR/Floortime Procedures

- Floortime procedures consist of the following “interventions”
 1. Follow the child’s lead
 2. Join in at the developmental level
 3. Open and Close “Circles of communication”
 4. Create a play environment
 5. Broaden the child’s interactive environment
 6. Tailor your interactions to the child’s individual differences in auditory processing, visual spatial processing, motor planning and sequencing and sensory modulation
 7. Simultaneously attempt to mobilize the six functional developmental levels

Guidelines or Procedures

- Requirement for “procedures” to be “technological” which means:
 - All of the procedures used must be completely identified and precisely described
 - “play therapy must be described as a set of contingencies between child response, therapist response, and play materials, before a statement of technique has been approached” (Baer, Woolf & Risley, 1968)
- Do the procedures in Floortime meet this requirement?
- Can “procedural fidelity” occur?

Inconsistent Implementation

- What will the effect on learning be if...
 - different people do different things each time you are with them?
 - If the adults change response requirements for each prompt?
 - If some problem behaviors routinely access reinforcement
 - If emerging adaptive behaviors fail to access reinforcement?
- “Floortime is not about doing a right or wrong thing it’s a process in which you and your child are always learning” (pg 181, , Engaging Autism , Greenspan & Weider, 2006)

Ethics??

- Right To Effective Behavioral Treatment:
 - Van Houten, Axelrod, Bailey, Favell, Foxx, & Lovaas, (1988)

Intervention Procedure	Peer Reviewed Journal Studies Identified
ABA Procedures	
Discrete trial teaching	840
Picture Exchange Communication System (PECS)	525
Functional Analysis	1,275
Mand Training	163
DIR/Floortime Procedures	
Follow the Child's Lead	1* - critical
Circles of Communication	0
Broaden the range of processing and motor capacities used in interactions	0
Functional Emotional Development	4* (3 theoretical)

Identification of studies of the target procedure : EBSCO Host 3/22/17

Limiters (whole intervention name in the article title- Must be an actual study of the target procedure *),
1990-2117 full text, Scholarly journal

Then only peer reviewed journals

Questions - Discussion