



Applied Behavior Analysis

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Disclosures

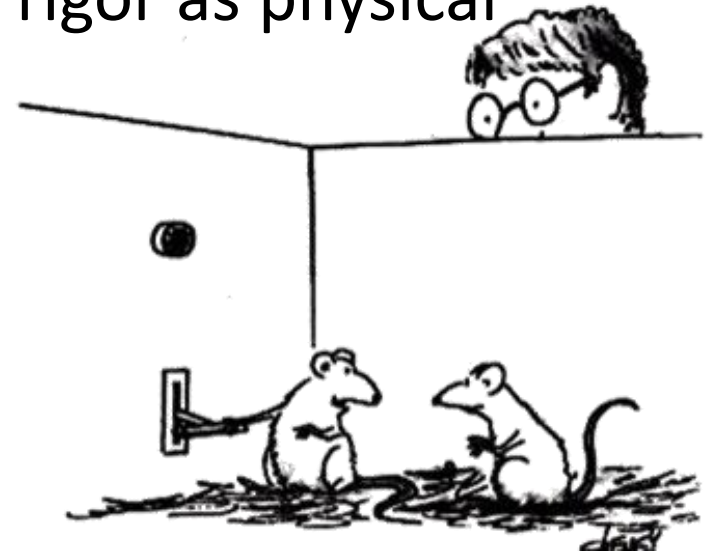
Neither I nor my spouse/partner has a relevant financial relationship with a commercial interest to disclose.

Historical/Conceptual Underpinnings

- Behaviorism

- Response to existing schools of psychology focused on self-report/introspection
- Attempted to instill the same rigor as physical sciences

- Data driven
- Direct observation
- Study the behavior of a single organism



It's an interesting phenomenon on, every time I press this lever that postdoc over there breathes a sigh of relief!

Branches of Behavior Analysis



Behavior Analysis

A scientific approach to
studying behavior

Experimental Analysis of Behavior (EAB)

Basic science; studying basic
principals of behavior for their
own sake

Reinforcement
Punishment
Behavioral Economics
Momentum Theory
Stimulus Equivalence

Branches of Behavior Analysis



Behavior Analysis

A scientific approach to studying behavior

Experimental Analysis of Behavior (EAB)

Basic science; studying basic principals of behavior for their own sake

Applied Behavior Analysis (ABA)

Application of basic principals to address issues of social significance

Applications of ABA

- Individuals with developmental disabilities
 - Skill acquisition
 - Treating challenging behaviors
 - Aggression, self-injury, property destruction
 - Pica
 - Elopement
 - Enuresis/encopresis
- Others
 - Improving safety in industry
 - Education
 - Compliance with medical procedures

An Inflection Point

- Lovaas (1987)¹
 - Preschoolers with ASD randomly assigned to...
 - Treatment (n=19): 40 hours of intensive behavioral intervention for 2 years
 - Control 2 (n=19): 10 hours of intervention
 - 47% in treatment group showed normal IQ and were “successful” in regular education 1st grade
- Subsequent advocacy by parent and other interest groups resulted in reimbursement of ABA for individuals with ASD

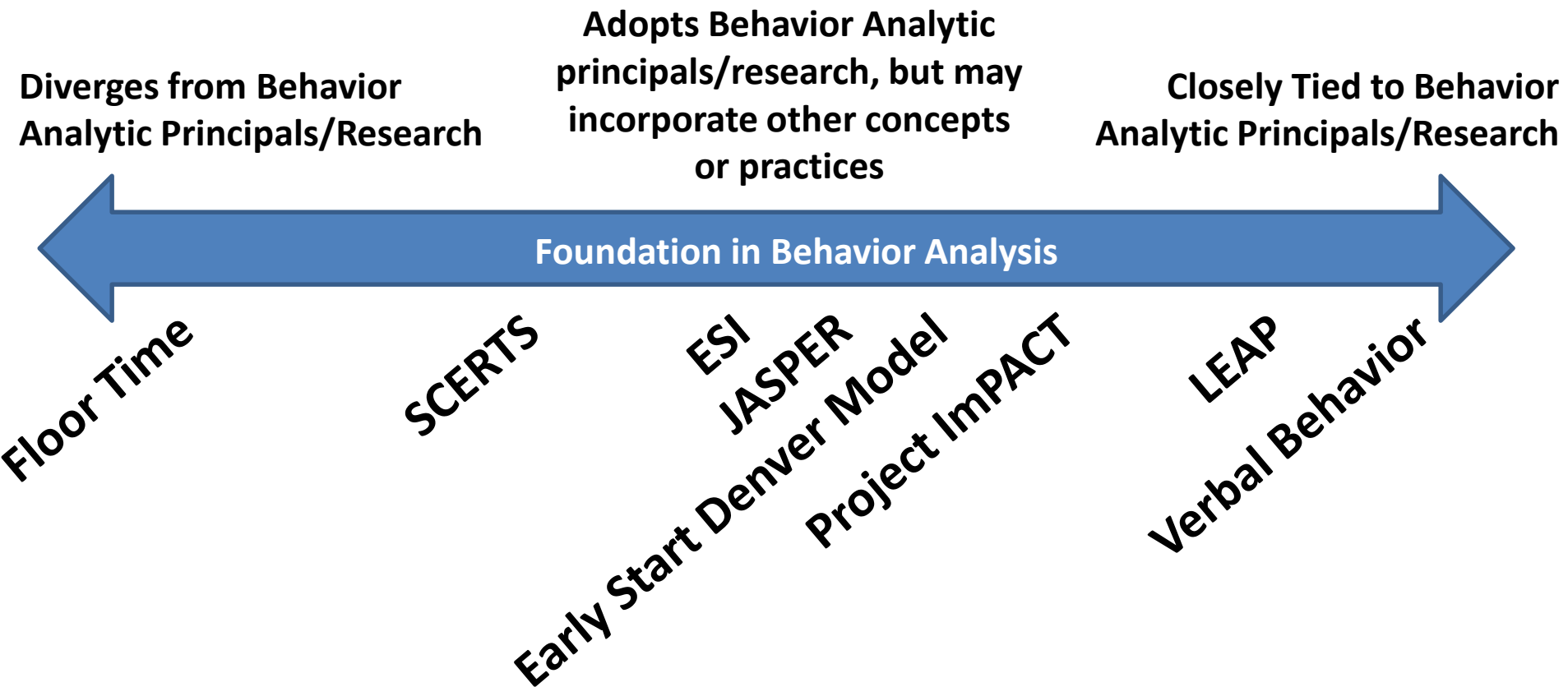
ABA for ASD

- Discrete Trials Teaching (DTT)
 - Structured learning trials, often using arbitrary reinforcers to ensure high motivation
 - Good for getting skills in the child's repertoire as rapidly as possible
 - Can be required for children with ASD with limited/restricted preferences or very limited repertoires
- Natural Environment Teaching (NET)
 - Embed learning trials into play or daily routines to capitalize on naturally occurring motivation/reinforcers
 - Generalization

Influence of Historical Principals

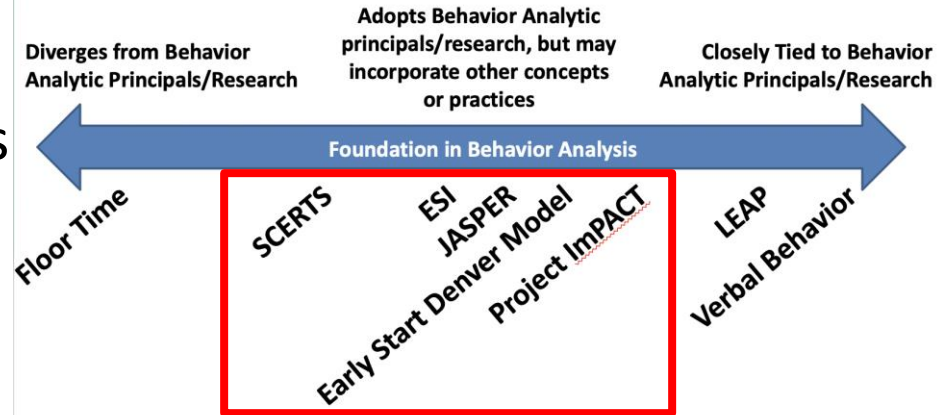
- **Data driven**
 - Good for capturing change and holding providers to account
 - Bad if the focus is on producing good data and not the most meaningful outcomes
- **Emphasis on single subject research**
 - Good for showing what's possible for an individual
 - Bad for meeting a rising bar for what is considered empirically supported (e.g., RCTs) and dissemination of findings to non-ABA audiences
- **Basic principals of behavior**
 - Good for being conceptually systematic
 - Bad if it leads to dogmatism or nomenclature interferes with communication with consumers/collaborators

“Brand Names”



Naturalistic Developmental Behavioral Intervention

- Authors of several empirically supported treatment packages collaborated on a paper recognizing that they have more commonalities than differences



- Among other features, NDBIs place greater emphasis on
 - Aligning treatment targets with typical child development
 - Understanding ASD
 - Caregiver training
- But are less rooted in basic principals of behavior

ABA as a New Profession

- Certification/Licensure
 - Board Certified Behavior Analysts (BCBA)
 - Registered Behavior Technician (RBT)
- Quality measures and best practice guidelines are still being developed
- Not all providers are equally skilled at all facets of treatment (e.g., addressing problem behavior)

Thank You

Questions?

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