Overview of Behavior Analysis:
What On Earth is THAT?

Presented by
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SunCoast Region

Some Terms
- BACB = Behavior Analysis Certification Board
- LRC = Local Review Committee
- PRC = Peer Review Committee
- APD = Agency for Persons with Disabilities
  - Formerly Developmental Disabilities Program, (part of the Department of Children and Families)
- MAXIMUS = Prior Service authorization contractor
- APS = Prior Service authorization contractor
- Delmarva = Quality Assurance Monitor
- Mercer = established “fair and equitable” rate structure

History of Behavior Analysis
- Applied Behavior Analysis
- Founders of Behavior Analysis
  - Edward Thorndike
    - Law of Effect
  - John Watson
    - Stimulus-Response

Behavior Analysts Do What?
- Assessments and interventions for complex and dangerous behaviors
- Technical assistance for providers, schools and so on
- Behavior management training and on-site support for caregivers/parents/staff

Behavior Analysts Help How?
- Demonstrate and teach "tools" (behavioral techniques and strategies)
- Provide professional practice for "tools"
- Troubleshoot, coach, and provide on-site support
Essential Characteristics of Applied Behavior Analysis

Baer, Wolf, & Risley (1968, 1987)
- Applied
- Effective
- Analytic
- Conceptually Systematic
- Behavioral
- Generality
- Technological

It is about probabilities not absolutes

Consequences

desirable

undesirable

Behaviors

Why behaviors happen . . .

- For the expected/typical consequences
- For a payoff ~
  - To get something
  - To get away from something or someone
- Not too many are automatic or hard wired

A change of focus can make a difference

- What behavior do you want in the situation
  - NOT
- What behavior do you want to stop
- Not all undesirable behavior needs to be targeted

Teaching Replacement Behaviors

Problem behavior:
- Andy hits Patty and steals her frozen treat.

Replacement behavior:
- Andy ______ and waits for a frozen treat.

Many problem behaviors are a result of limited ____________ skills.

Teaching Replacement Behaviors

More Examples:
- Seeking attention
- Requesting help
- Negotiating activity or task completion
- Requesting preferred materials or activities
Basic Behavior Principles

- Behavior is largely a product of the environment (read daily experiences).
- In the end, behavior responds better to positive consequences.
- It takes time for changes in the environment to change behavior.
- Past behavior is the best predictor of future behavior.
- Consequences can either strengthen or weaken behavior. The only way to know the effects of a consequence is by what happens to the behavior in the future.

Characteristic of Behavior Analysis

- Emphasis on analyzing and modifying functional relationships between: Behavior and the current Environment: (the Antecedents & Consequences)

Characteristic of Behavior Analysis

- Emphasis on analyzing and modifying functional relationships between: Behavior and the current Environment: (the Antecedents & Consequences)
- NO emphasis on the distant past (may provide some useful info, but cannot be changed)

Circular explanations .......

- Because of his (distractible) behavior he appears to be ADHD

Circular explanations .......

- Due to his ADHD he has (distractible) behavior
Circular explanations .......
- May inappropriately shift the focus of the intervention away from the behavior
- May blame the entire problem on the "inner pathology" of the child

Circular explanations .......
- May result in over-reliance on medication as the sole treatment
- May cause other potentially effective treatments to be abandoned

Characteristics of Behavior Analysis
- Rejection of "underlying causes"
  - circular explanations (can never be measured, manipulated, scientifically proven or disproven),
  - explanatory or mentalistic fictions

Prevalent Psychological Beliefs
- How the brain affects behavior...
  OR
- How behavior affects the brain...

Prevalent Psychological Beliefs
- All behavior comes from the brain, it is the biological basis for all behavior
- (This is NOT a belief accepted by Behavior Analysts)

Some consequences increase the chances that a particular behavior will occur again.
This is referred to as reinforcement.
Some consequences decrease the chances that a particular behavior will occur again. This is referred to as punishment.

Other consequences have no effect on behavior. For example, each time you sneeze, someone might say, “bless you”.

REVIEWING THE DIFFERENCES:
- Reinforcement makes something stronger (or repeatable)
- Punishment makes something weaker (or to go away).
Miami Sunland

Abuse & neglect investigations:
- Abusive punishment practices
- Military-style disciplinary measures
- Deprivation, restraint, and seclusion
- Social isolation
- Aversive stimuli
- Public shaming/humiliation

Miami Sunland (cont’d)

Changes:
- Media exposes & Investigations
- Dismissals
- Major changes in administrative policies
- Blue Ribbon Committee of Expert Behavior Analysts
- Behavior Management Regulations
- Florida Statutes and Rule 65B-4
- Better training requirements
- Certification of behavior analysts

Foundations of Behavior Analysis in Florida Law

- F.S. Chapter 393
  - Bill of Rights for the Developmentally Disabled
  - Certification Program in Behavior Analysis
  - Establish system of oversight
  - Establishes informed consent (including refusing treatment)
  - Medical Rule Out
  - No client shall be subjected to a treatment program to eliminate bizarre or unusual behaviors without first being examined by a physician who in his or her best judgment determines that such behaviors are not organically caused
  - Treatment programs involving the use of noxious or painful stimuli shall be prohibited
  - Restraints shall not be employed as punishment, for the convenience of staff, or as a substitute for a rehabilitative plan. Restraints shall not cause physical injury to the client and shall be designed to allow the greatest possible comfort

F.A.C. 65G-4.0001-4.011

- Established certification program for behavior analysts
  - FL-CBA
  - FL-CBA/e
  - FL-CABA
  - Taken over by BACB in 2005
  - Established procedure for PRC and LRC review
  - Established definition of behavior analysis services (what it is and what it is NOT)

<table>
<thead>
<tr>
<th>Not counseling</th>
<th>Not psychotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not hypnotherapy</td>
<td>Not sex therapy</td>
</tr>
<tr>
<td>Not neuropsychology</td>
<td>Not psychoanalysis</td>
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F.A.C. 65B-4.023-4.031 (cont’d)

- Established guidelines for design, implementation and monitoring of behavior analysis Services
  - The “Ten Commandments”
  - Monitoring plan
- Established process for approving behavior plans
  - Restricted procedures
  - “Protected” Behaviors
- Established process for disciplinary action and grievance procedure for non-compliance

Levels of Certification

- BCBA = Board Certified Behavior Analyst
- BCABA = Board Certified Associate Behavior Analyst
- FL-CBA = Florida Certified Behavior Analyst
Behavior Analyst “Levels”

Per Mercer Rate Matrix

- **Level I** = BCBA, FL-CBA/e, or Psychologist, LMHC or LCSW with more than 3 years experience post certification/licensure (regardless of having a Master’s or Doctorate)
- **Level II** = BCBA, FL-CBA/e, or Psychologist, LMHC or LCSW with less than 3 years experience post certification (or FL-CBA with Masters or Doctorate, regardless of experience)
- **Level III** = BCABA FL-CABA or FL-CBA with bachelor’s or high-school diploma regardless of experience

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The “Others”

- Due to the exemption in F.S. Chapter 490 and 491, these professionals may provide Behavior analysis services under Florida law:
  - Licensed Mental Health Counselors
  - Licensed Clinical Social Workers
  - Licensed Psychologists
- NOTE: only board certified analysts are governed by the board

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Critical Areas of Service

- Direct Service
- Residential Habilitation with a Behavior Focus
- Intensive Residential Habilitation
- Residential Habilitation for children in their home
- Behavior Services Assistant
- ADT 1:1

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Role of the LRC

- Determine if behavior services comply with Florida Law (not “approving” plans)
- Formalized by By-laws (approved by APD Senior Behavior Analyst)
- Oversight of behavior analysts in the district
- Includes sub-committees
- Overseen by LRC chair
- May provide technical assistance to provider as needed
- Comprised of leaders of behavior analysis in their district
- LRC review is part of the approved monitoring plan in the behavior plan

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Who Can Approve What?

<table>
<thead>
<tr>
<th>Analyst</th>
<th>Approval</th>
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<tbody>
<tr>
<td>BCBA</td>
<td>Any restricted procedure or procedures or any procedure to treat “protected” behaviors.</td>
</tr>
<tr>
<td>FL-CBA</td>
<td>Time-out from reinforcement of 20 minutes or less. Contingent removal or restriction of potential reinforcers. Contingent effort of 10 minutes or less. Contingent manual restraint of five (5) minutes or less.</td>
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<tr>
<td>BCABA</td>
<td>Non-restricted procedures or procedures to treat non-“protected” behaviors.</td>
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When LRC is Required

Protected Behaviors:

- **Self-inflicted**, external or internal damage requiring medical attention (have or likely will).
- **Life-threatening** situation might result (excessive eating or drinking, vomiting, ruminating, eating non-nutritive substances – pica – refusing to eat, holding one’s breath, swallowing air).
- **External or internal damage** to other persons (has or will occur), requiring medical attention.
- **Major property damage / destruction** (has or will occur).
- **Arrest and confinement** by law enforcement personnel (have or will)

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When LRC is Required

Restricted Procedures
- Presenting something to get rid of the behavior
- Removing something to get rid of the behavior
- Removing something to increase a behavior
- Satiation: Providing lots of something the person wants to get rid of the behavior (too much of a good thing)
  - Ex: Lots of attention given to reduce attention-seeking behavior
- Deprivation: Preventing access to something to get rid of the behavior
  - Ex: Removing attention to establish attention as a reinforcer

Restricted Procedures
1. Presenting something after the behavior in order to reduce that behavior (Type I Punishment) - e.g., School grades
2. Taking something away after the behavior in order to reduce that behavior (Type II punishment) - e.g., “You can’t go out with the rest of us since your bad, Sally”
3. Removing something after the behavior in order to increase that behavior (Negative Reinforcement) - e.g., Ken and the police car
4. Use of satiation and deprivation procedures - giving some one a lot of something or taking it away for long periods of time

Emergency Procedures
- Sometimes referred to as “reactive strategies”
- HRSM 160-4
- Appendix G
- Designed for “emergency” situations, not for programmatic use
- Use of an emergency procedure 3 or more times in a month requires approval by the LRC chair/DBA
- Use of emergency procedure outside of these guidelines requires approval by the LRC chair/DBA
- Documentation Requirements
  > Reactive Strategy Form
  > Daily reports and monthly summaries of the use of these procedures to District Administrator

Types of emergency procedures
- Time out by Isolation
- Time out by Exclusion
- Mechanical Restraints
- Protective Equipment
- PRN medication (e.g. chemical restraints)

What is best practice in the use of these procedures?

Things you should NEVER see:
- Physical punishment: hitting, paddling, pinching, pushing
- Use of painful or aversive substances to control behavior: pepper on tongue, squirt of lemon juice, electric shock, etc.
- Verbal abuse: cursing, using slurs or derogatory names, screaming
- Humiliation: forcing to wear a dunce cap, attempting to embarrass or ridicule, keeping in wet/soiled clothing.
- Placing clients in dark time out rooms, placing clients in locked time out without supervision

Effective behavior analysts will:
- Interpret a presenting problem into environmental-behavior relationship
- Translate it into a relationship of the individual’s behavior, current environment, history and the contingencies affecting the behavior
- Develop interventions that are fluent with respect to behavioral assessment
- Develop interventions that address the specific behaviors of concern
- Measure changes in the behavior
Indicators that a person might need behavioral services

- Frequent changes in residence or providers
- Several psychotropic medications or medications that might be indicated for behavioral control/aggression
- Diagnoses of schizophrenia, schizoaffective, psychosis, intermittent explosive disorder, obsessive-compulsive, personality disorder, anxiety disorders, borderline personality, etc.

Indicators that a person might need behavioral services

- The problem is in the extreme nature of the behavior
- Some behaviors happen too frequently or in the wrong situations
- Some behaviors happen too infrequently or very sporadically
- Behaviors result in isolation, poor quality of life, trouble with others, loss of opportunities

Indicators continued

- More than one baker act situation
- Police calls
- Property damage requiring restitution
- Property damage visible in living situation
- “Chooses” to not participate in activities, ADT, NRSS sleeps and watches TV, sits around
- Scars on face, head, hands

Florida DS/HCBS behavioral services

- Behavioral Assessment
- Behavioral Therapy (individual intervention plan development, monitoring and training)
- Behavioral Services Assistant
- Residential Habilitation with Behavior Focus
- Intensive Behavioral Residential Habilitation

How can I know a person is getting quality services?

Issues in Evaluating Appropriate/Effective Behavioral Services

- What should you see in records?
- What should you see in the environment?
In The Records:
- Service need identified (generally) in Support Plan
- Assessment indicating causal events and skills present and needed
- Objectives for learning new skills as well as decreasing problems
- Local Review Committee review, referral, schedule for review, recommendations
- Plan has updates and changes if in place more than three months
- Documentation of monitoring of data, staff implementing, recipient’s behavior

In The Environment:
- Evidence of data collection in the moment
- Frequent positive interactions
- Staff interacting with recipients - more than just directions
- Choice of activities, consequences, etc.
- Professional activities, consequences, etc.

A Gold Standard - Assessment
- Summarize and quantify the data and observations
- Analyze and develop hypotheses about the behavior
- Describe specific circumstances, not general statements of processes
- Questionnaires are not enough!

A Gold Standard – Assessment (cont’d)
- Gives the whole picture of the individual and his/her environment
- Includes a brief social history and necessary medical information
- Checks the facts and be objective
- Includes “need to know information” be aware of privacy rights

Questions for Behavioral Assessments
- Under what circumstances do the problem behaviors occur?
- Under what circumstances do the problem behaviors not occur?

Questions for Behavioral Assessments
- What are the typical reactions of others to the behaviors? (beyond what is reported)
- What are the typical contingencies for the problem behaviors?
- What are the typical contingencies for desirable behaviors?
Questions for Behavioral Assessments

- Do the persons' daily experiences provide more pleasurable, desirable contingencies or more aversive contingencies?
- What do "skilled" persons do in similar circumstances?
- What skills does the individual need to improve or develop or do more often to be more like the skilled individuals?

A Gold Standard:
Measurement of Behavior

- Specific definitions for measurement
- Frequent measurements
- User friendly
- Graphic display is up-to-date

A Gold Standard Graph for Assessment

A Gold Standard Behavior Intervention Plan

Is not like a recipe from your great grandmother:
- a pinch of that
- do this until its done
- and so on...

A Gold Standard Behavior Intervention Plan

Is like:
- Instructions to building a finely tuned machine!

Task analysis of skills to be taught
- Objectives lead to the behavior occurring in as natural a manner as possible
- Simple steps
- Tells staff what to do when a behavior happens, does not happen, how to prevent problems, payoff for desired behaviors, identifies likely payoffs for the person
- Does not require interpretation
- Tells how to measure
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<tr>
<th>A Gold Standard Intervention Plan (cont'd)</th>
<th>Major sections of a Behavior Intervention Plan</th>
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<tbody>
<tr>
<td>✓ Has monitoring schedule for Local Behavioral Services Review Committee, behavior analyst, supervisor of staff etc.</td>
<td>• Demographics of person being served</td>
</tr>
<tr>
<td>✓ Is signed by behavior analyst designing and giving oversight</td>
<td>– Allow identification, location of person, guardian, support coordinator, legal status</td>
</tr>
<tr>
<td>✓ Has description of competency based, performance validation training</td>
<td>• Medications the person is taking and reason</td>
</tr>
<tr>
<td>7/1/2010</td>
<td>• Relevant diagnosis and medical conditions</td>
</tr>
<tr>
<td></td>
<td>• Reason for referral for behavioral services</td>
</tr>
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<td>• Summary of Assessment</td>
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<tr>
<td>• Target Behaviors</td>
<td>• Procedures for teaching acquisition behaviors.</td>
</tr>
<tr>
<td>– Acquisition behaviors for major goal, and at least first objective operationally defined, topographic response class</td>
<td>– Should tell when/how/what of reinforcement procedures.</td>
</tr>
<tr>
<td>– Reduction Behaviors – operational definition of behaviors including topographical response class</td>
<td>– Should tell anyone reading it, in simple terms, how procedures are done</td>
</tr>
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<td>7/1/2010</td>
<td>– Should be written in a step-by step format</td>
</tr>
<tr>
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<td>– Acquisition behavior should be functionally related to behavior targeted for reduction</td>
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<td>• Procedures for behaviors targeted for reduction.</td>
<td>Should be true that a reasonably educated person can read the procedures and without too much interpretation can follow the steps with reliability. (OF COURSE competency based training requires more than reading the procedures.)</td>
</tr>
<tr>
<td>– Procedures to prevent – including how to set up the environment, how to re-direct the individual when reliable precursors occur (identify reliable precursors)</td>
<td>7/1/2010</td>
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<tr>
<td>– Procedures for intervening when the behaviors occur. Step by step, with description of when this intervention turns into a crisis situation and should be addressed as such.</td>
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<tr>
<td>– Intervention with targeted behaviors should all end in reinforcement of an appropriate behavior.</td>
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Major sections of a Behavior Intervention Plan (cont’d)

- Procedures for staff/care-giver training
  - Competency based
  - Performance of procedures observed
  - Monitoring methods and schedule (by supervisors of staff, behavior analyst following the plan, overseeing the plan

Major sections of a Behavior Intervention Plan (cont’d)

- Generalization and Maintenance Procedures
- Plan for Fading
  - If BSA, plan for fading this service
  - If receiving 1:1 ADT services, plan for fading this service
- Ultimate and Intermediate Outcomes

Behavioral Services and the Medicaid Waiver

Important sources of information:
- The Developmental Services Waiver Services Florida Medicaid Coverage and Limitations Handbook
  - http://www.maximus.com/fipsap/
- Behavior Analyst Certification Board Guidelines for Responsible Conduct For Behavior Analysts
  (www.bacb.com)
- Florida Association for Behavior Analysis
  (http://www.fabaworld.org/)

Contact Information

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Questions/Comments