

Overview of Behavior Analysis: What On Earth is THAT?

Presented by
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7/1/2010

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)
 - Formerly Part of Health and Rehabilitative Services (HRS)
- MAXIMUS = Prior Service authorization contractor
- APS = Prior Service authorization contractor
- Delmarva = Quality Assurance Monitor
- Mercer = established "fair and equitable" rate structure

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History of Behavior Analysis

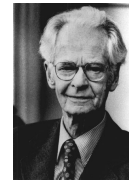
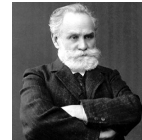
- Applied Behavior Analysis
 - 1968, Journal of Applied Behavior Analysis inaugural edition
- Founders of Behavior Analysis
 - Edward Thorndike
 - Law of Effect
 - John Watson
 - Stimulus-Response



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History of Behavior Analysis (cont'd)

- Ivan Pavlov
 - Respondent Condition
- B. F. Skinner
 - Operant Conditioning



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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



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Behavior Analysts Help How?

- Demonstrate and teach "tools" (behavioral techniques and strategies)
- Provide professional practice for "tools"
- Troubleshoot, coach, and provide on-site support



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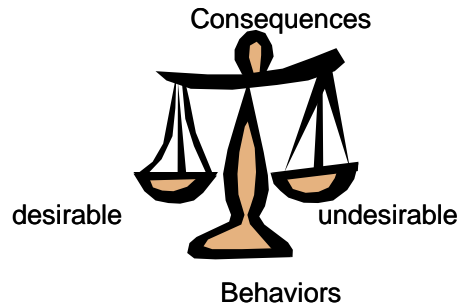
Essential Characteristics of Applied Behavior Analysis

Baer, Wolf, & Risley (1968,1987)

- Applied
- Effective
- Analytic
- Conceptually Systematic
- Behavioral
- Generality
- Technological

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It is about probabilities not absolutes



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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

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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

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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.**



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Teaching Replacement Behaviors

More Examples:

- Seeking attention
- Requesting help
- Negotiating activity or task completion
- Requesting preferred materials or activities

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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.

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Characteristic of Behavior Analysis

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

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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)

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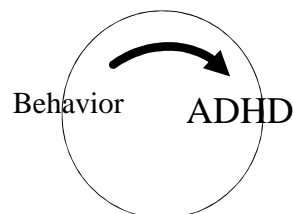
Characteristic of Behavior Analysis

- Rejection of “underlying causes”
 - circular explanations (can never be measured, manipulated, scientifically proven or disproven)

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Circular explanations

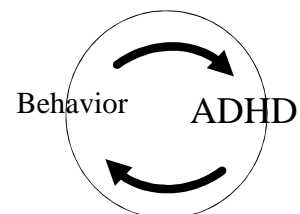
- Because of his (distractible) behavior he appears to be ADHD



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Circular explanations

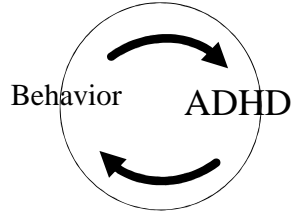
- Due to his ADHD he has (distractible) behavior



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Circular explanations

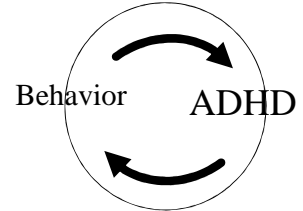
- May inappropriately shift the focus of the intervention away from the behavior
- May blame the entire problem on the “inner pathology” of the child



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Circular explanations

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



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Characteristics of Behavior Analysis

- Rejection of “underlying causes”
 - circular explanations (can never be measured, manipulated, scientifically proven or disproven),
 - explanatory or mentalistic fictions

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Prevalent Psychological Beliefs

- How the brain affects behavior...
- OR
- How behavior affects the brain...
- All behavior comes from the brain, it is the biological basis for all behavior

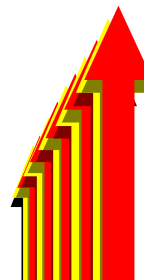
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Prevalent Psychological Beliefs

- How the brain affects behavior...
- OR
- How behavior affects the brain...
- All behavior comes from the brain, it is the biological basis for all behavior
- (This is NOT a belief accepted by Behavior Analysts)

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Some consequences increase the chances that a particular behavior will occur again.



This is referred to as reinforcement.

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Some consequences decrease the chances that a particular behavior will occur again.



This is referred to as punishment.

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REVIEWING THE DIFFERENCES:

- Reinforcement makes something stronger (or repeatable)
- Punishment makes something weaker (or to go away).

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Other consequences have no effect on behavior.

For example, each time you sneeze, someone might say, "bless you".



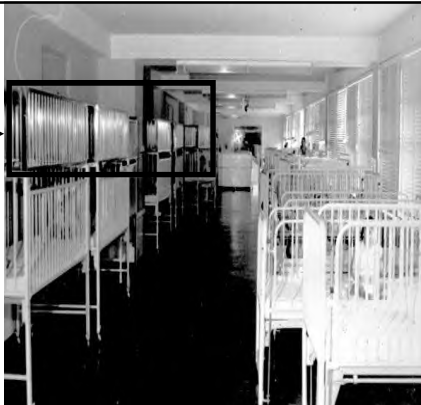
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a Typical Ward



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Note barred cribs



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Residents Brushing Teeth in Multi-Purpose Basin

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Miami Sunland

Abuse & neglect investigations:

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

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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

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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 habilitative plan. Restraints shall not cause physical injury to the client and shall be designed to allow the greatest possible comfort

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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)

Not counseling	Not psychotherapy
Not hypnotherapy	Not sex therapy
Not neuropsychology	Not psychoanalysis

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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

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Levels of Certification

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

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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?

BCBA	Any restricted procedure or procedures or any procedure to treat “protected” behaviors
FL-CBA	<ul style="list-style-type: none"> • 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.
BCABA	Non-restricted procedures or procedures to treat non-“protected” behaviors

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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

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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 someone a lot of something or taking it away for long periods of time

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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 a behavior plan be developed to address the behavior(s) for which the procedure was used
- 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

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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?

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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

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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

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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, schizo-affective, psychosis, intermittent explosive disorder, obsessive-compulsive, personality disorder, anxiety disorders, borderline personality, etc.

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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

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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

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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

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How can I know a person is getting quality services?

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Issues in Evaluating Appropriate/Effective Behavioral Services

- What should you see in records?
- What should you see in the environment?



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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

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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 staff on the floor, familiar with schedule, recipients, staff

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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!**

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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

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Questions for Behavioral Assessments

- Under what circumstances do the problem behaviors occur?
- Under what circumstances do the problem behaviors not occur?

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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?

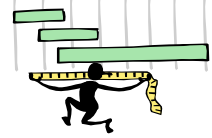
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Questions for Behavioral Assessments

- ☞ 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?

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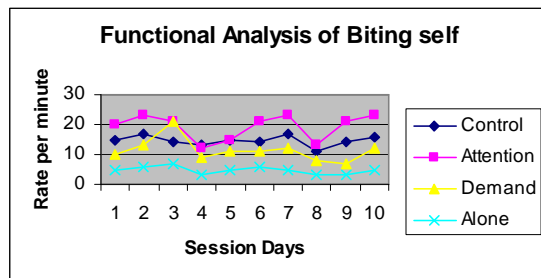
A Gold Standard: Measurement of Behavior



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

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A Gold Standard Graph for Assessment



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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...



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A Gold Standard Behavior Intervention Plan

Is like:

- Instructions to building a finely tuned machine!



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A Gold Standard Intervention Plan

- 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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A Gold Standard Intervention Plan (cont'd)

- ✓ Has monitoring schedule for Local Behavioral Services Review Committee, behavior analyst, supervisor of staff etc.
- ✓ Is signed by behavior analyst designing and giving oversight
- ✓ Has description of competency based, performance validation training

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Major sections of a Behavior Intervention Plan

- Demographics of person being served
 - Allow identification, location of person, guardian, support coordinator, legal status
- Medications the person is taking and reason
- Relevant diagnosis and medical conditions
- Reason for referral for behavioral services
- Summary of Assessment

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

- Target Behaviors
 - Acquisition behaviors for major goal, and at least first objective operationally defined, topographic response class
 - Reduction Behaviors – operational definition of behaviors including topographical response class

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

- Procedures for teaching acquisition behaviors.
 - Should tell when/how/what of reinforcement procedures.
 - Should tell anyone reading it, in simple terms, how procedures are done
 - Should be written in a step-by step format
 - Acquisition behavior should be functionally related to behavior targeted for reduction

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

- **Procedures for behaviors targeted for reduction.**
 - Procedures to prevent – including how to set up the environment, how to re-direct the individual when reliable precursors occur (Identify reliable precursors)
 - 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.
 - Intervention with targeted behaviors should all end in reinforcement of an appropriate behavior.

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

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.)

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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)

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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

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

- Date intervention plan written
- Date reviewed by LRC
- Dates revised
- Name and signature of author and behavior analysts monitoring the plan
- Dates plan implemented
- Signed informed consent by person receiving services

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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/flpsap/>
- The Delmarva Foundation Monitoring Checklists and Protocols - <http://www.dfmc-florida.org>
- **Behavior Analyst Certification Board Guidelines for Responsible Conduct For Behavior Analysts** (www.bacb.com)
- Florida Association for Behavior Analysis (<http://www.fabaworld.org/>)

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Contact Information

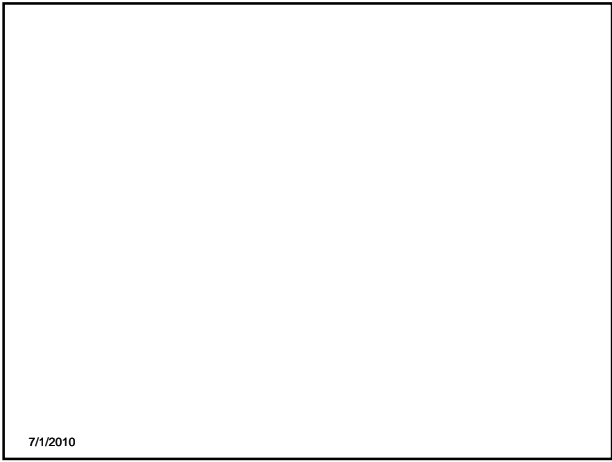
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Questions/Comments



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