

**PREVENTION, INTERVENTION and TEACH
(PIT): A COMPREHENSIVE TREATMENT
APPROACH**

By Xavier J. Polk, Ph.D. 5/11
drpolk@behsysanalysis.com

+

Undesirable behaviors occur for a reason

+

If you can identify the reason, then
you may be able to remedy the
problem



Variables affecting undesirable behaviors

1. Physical/medical
2. Emotional/ psychological
3. Unmet need – the person wants something
4. Wants to escape-avoid something unpleasant
5. Skill deficits



Factors that may complicate the analysis process

1. Two or more variables may affect the same behavior at any given time
2. Different values of the same variable may differentially affect the same behavior across time.
3. Different combinations of variables may affect the same behavior across time
4. The same or different combinations of variables may affect different behaviors



Miscellaneous factors that complicate the analysis process

1. The person-of-interest may lack adequate verbal skills
2. Individual records may not be accurate or complete
3. The reports of service providers may be influenced by many variables and, consequently, may not accurately reflect what's going on

+

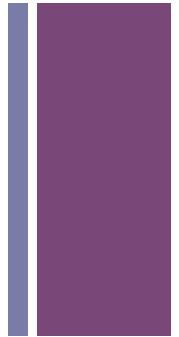
TREATMENT STEPS





The treatment process can be divided into 12 steps

1. Identify the *problem behavior*
2. Define the problem behavior
3. Measure the problem behavior
4. Analyze the problem behavior
5. Identify one or more critical adaptive behaviors (skills) to teach
6. Establish a goal



7. Develop a comprehensive treatment plan
8. Develop an implementation plan
9. Teach staff to use the plan
10. Start the teaching/treatment process
11. Continue measuring the target behaviors and skills
12. Adjust the treatment plan



Each step requires the behavior-change agent to do the following

1. Consider a range of programming options (choices)
2. Conduct a benefit-risk analysis
 - A. Benefits
 - B. Risks
 1. Negative Cost
 2. Opportunity Cost
3. Select the most appropriate option
4. Correctly implement an option

+

Step #1. Identify the *problem behavior*



Points to consider

1. Is the stated problem the real or most important problem?
2. What are the risks and benefits of targeting it?
3. Can it be treated with the ABA model?
4. Does it lie within the behavior-change agent's area of competency and specialization?
5. Who owns the problem?
6. What are the socio-political variables?
7. Are there any cognitive distortions?

+

Step #2. *Define the problem behavior/skill*

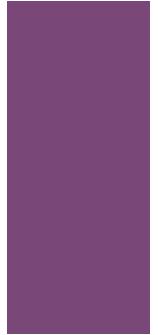


Points to consider

1. Must be defined in *behavioral terms* and in a manner that allows independent observers to agree that it did or did not occur
2. In some instances, must be defined in relationship to antecedent events
3. For complicated skills, a task analysis may be needed or they may have to be dissected into their component parts

+

Step #3. *Measure* the behavior



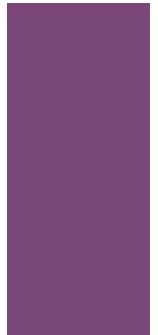


Points to consider when collecting data

1. The data should be valid and accurate
2. May allow us to determine if there really is a problem
3. Allows for more objective assessment of treatment outcomes
4. May promote greater objective decision-making
5. Will assist in the functional/descriptive analysis process

+

Step #4. Analyze the behavior





Obtain the following descriptive information

1. Indirect or contributing factors (i.e., *setting events*)
 - A. *Medical- or organic-related issues*
 - B. *Psychological- or emotional-related issues*
 - C. Unpleasant or aversive situations leading to escape-avoidance
 - D. Unmet needs
 - E. Skills deficits
2. Triggers



Obtain the following descriptive information (cont.)

3. Early warning signs of the problem behavior (i.e., behavioral antecedents)
4. Conditions that maintain (*reinforce*) the targeted undesirable behavior
 - A. Positive reinforcers
 - B. Negative reinforcers
5. Possible replacement or alternative skills to teach
6. Preferences and possible programmed reinforcers
7. Idiosyncrasies that may affect treatment outcomes



Sources of information

1. Ask the client
2. Observe the client
3. Record review
4. Diagnostic teaching approach: Develop a working hypothesis, put the hypothesis to the test and then see what happens
5. Formal functional analysis: Analyze a problem and/or treatment option using conventional ABA experimental designs

+

**Step #5. Select adaptive behaviors
(skills) to teach**



If *escape avoidance*, then consider teaching

1. A socially acceptable escape-avoidance (e.g., to say, “Home,” rather than hitting a staff person in order to be suspended for the day and sent home)
2. To tolerate the stressor (i.e., maintain self control and accept the fact that you won’t be able to escape-avoid)
3. To delay gratification (i.e., to *wait* before being able to escape-avoid)
4. How to manage the stressor (e.g., to ask staff for a snack in order to alleviate hunger as opposed to being sent home and then given a snack)
5. To accept being told, “No.”



If *approach* function, then consider teaching

1. A socially acceptable way of getting a need met (e.g.. to ask staff for a meeting rather than threatening to injure herself)
2. To tolerate a stressor (i.e., maintain self control and accept the fact that you won't be able to get a need met)
3. To delay gratification (i.e., to have to *wait* before getting a need met)
4. How to manage the stressor (e.g., to ask staff for the desired object or problem solve)
5. To accept being told, "No."



If teaching a complex or difficult skill, consider doing the following

1. Perform a *task analysis* and be prepared to teach component parts (chains)
2. Dissect the skill/behavior and identify, and be prepared to teach its sub-skills

+

Step #6. Establish a goal





Possible goals

1. *Acquisition* -- Demonstrated competency in the immediate teaching situation with full instructional support

2. *Maintenance* -- Sustained competency in the original teaching situation without full instructional support

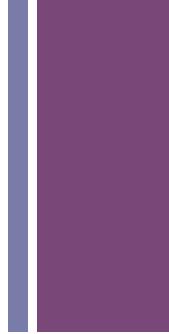
3. *Generalization* -- Demonstrated competency in new or different non-teaching situations.
 - A. People (staff, teachers, peers, etc.)
 - B. Tasks/activities
 - C. Settings/situations

+

Step #7. Develop a comprehensive treatment plan (PIT)



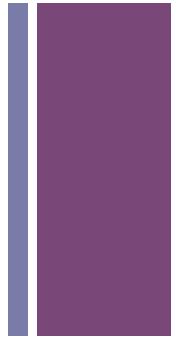
Three parts of a comprehensive plan



1. *Prevention Plan*: A plan to prevent or decrease the likelihood that the undesirable behavior occurs
2. *Intervention Plan*: A plan that allows staff to manage the targeted undesirable behavior(s)
3. *Teaching Plan*: A plan that teaches critical skills

+

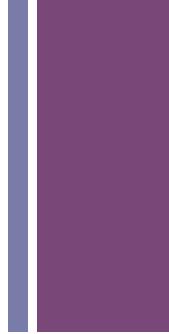
Step #8. Develop an
implementation plan



Implementation Plan: A plan describing how the actual comprehensive treatment plan will be implemented



Programming strategies and treatment options



1. Immediately establish the minimum necessary conditions needed to prevent undesirable behaviors from occurring
2. If the objective is to establish a *prosthetic environment*, then maintain the behavioral supports indefinitely



Programming strategies and treatment options (cont.)

3. If the objective is to provide a therapeutic environment, then consider these options:
 - A. In general, think in terms of sequentially promoting acquisition, maintenance and then generalization
 - B. Start reducing behavioral supports as soon as the target behavior/skill(s) stabilize
 - C. When applicable, use a planned response-reduction technique in a progressively larger number of situations/settings – an example of stimulus narrowing



Programming strategies and treatment options cont.

- D. Teach the person to perform the target skill in progressively more stressful situations– possibly using exposure techniques
- E. If the objective is to promote generalization, then sequentially teach the target skill across a progressively larger number of people (staff), situations/activities, and settings
- F. Have a master teacher teach the skill during the acquisition phase of teaching. Then fade in other staff. Across time, work on the target skill/behavior in a progressively larger number of setting and situations.

+

Step #9. *Teach staff how to use the plan*



Staff training-related issues

1. You can't assume that staff know how to implement a plan. In fact, you should assume that they don't, even if they say they do.
2. Just because someone has worked in the field for a long time, doesn't mean that they are competent teachers.
3. Just because one person has known another person for a long time, doesn't mean that s/he will be an effective teacher with that person.
4. Staff may be more likely to implement a plan if supervising staff also know how to implement it.

Bottom Line: Staff have to be trained to implement the plan

+

**Step #10. Start the teaching/
treatment process**

+

Step #11. Continue *measuring* the target behaviors/skills

+

Step #12. *Adjust the treatment plan in response to the data*



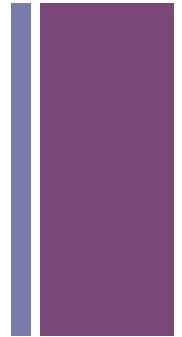
Factors affecting treatment outcomes

Note: There are innumerable factors. But common ones to exclude include:

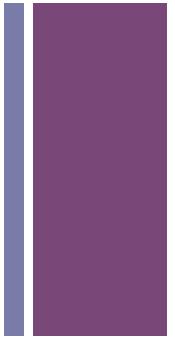
1. Incorrect working hypothesis about why the undesirable behavior is occurring or why the desired behavior isn't occurring
2. Wrong intervention plan chosen
3. Inadequate reinforcement or reinforcement schedule
4. Lack of an adequate implementation plan; in particular, one that is sensitive to staff- and resource-related variables
5. Inadequately trained staff
6. Poorly motivated staff
7. Miscellaneous socio-political variables



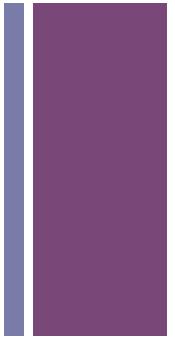
TYPICAL ASSESSMENT-TREATMENT PROCESS



1. Record review and/or primary care provider interview
2. In necessary, observe the primary and secondary clients interact
3. Formulate a working hypothesis

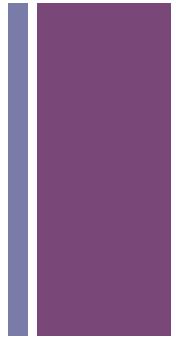


4. Prioritize the objectives/goals and develop an implementation plan. Typically, the plan is
 - A. Psychologist implements plan in controlled situations
 - B. Primary service providers implement the plan in the original treatment setting
 - C. Try and fade out supports
 - D. Across time, promote generalization



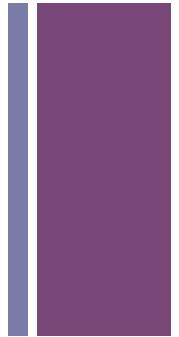
5. Develop a three-part treatment plan

- A. Prevention: Manage stressors (environmental antecedents)
- B. Intervention: See response-reduction hierarchy
- C. Teach



Teaching Options Include

- a. Educate (using one or more of the following)
 - Describe expectations and/or contingencies
 - Provide explanation
 - Model
 - Positive Practice
 - Feedback

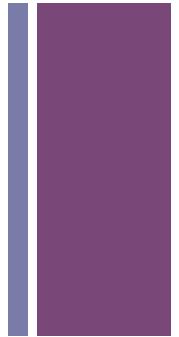


b. Response differentiation

- M.P.: Emotional outbursts and sitting on the sofa
- D.C.: Feeding himself

c. Shaping

- R.C.: Walking longer distances without being aggressive
- O.G.: Waiting longer

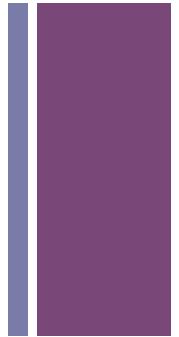


d. Exposure

- Touch/physical contact
- Noise/congestion
- Waiting
- Someone saying no
- Separating from personal possessions

e. Chaining

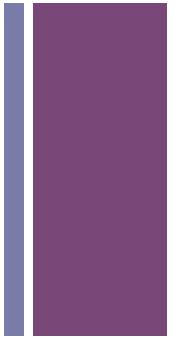
f. Prompting



6. The psychologist implements plan during acquisition

- A. Models desired teaching skill
- B. Reduces confounding variables
- C. Debunks myths

7. Primary care provider taught to use the plan on a limited basis



6. Provide maintenance training with the primary care provider on the first goal
7. Establish and start working on the next goal or start programming generalization
8. Repeat Steps #4- 7 until all goals are met



Bibliography

- Cooper, J. O., Heron, T. & Heward, W. L. (2007). *Applied Behavior Analysis* (2nd Ed.). Upper Saddle River, NJ: Parson Education, Inc.
- Kearney, A. *Understanding Applied Behavior Analysis: An Introduction to ABA for Parents, Teachers and Other Professionals* (2008). London and Philadelphia: Jessica Kingsley Publishing.
- Koegel, R. L. and Koegel, L. K. (Eds.) (1995.) *Teaching Children With Autism: Strategies for Initiating Positive Interactions and Improving Learning Opportunities*. Paul H. Baltimore, Maryland. Brookes Publishing Co., Inc.
- Mayer, G. R., Zulzer-Azaroff, B. and Wallace, M. (2012). *Behavior Analysis for Lasting Change 2nd Ed.* Cornwall-on-Hudson, New York: Sloan Publishing.