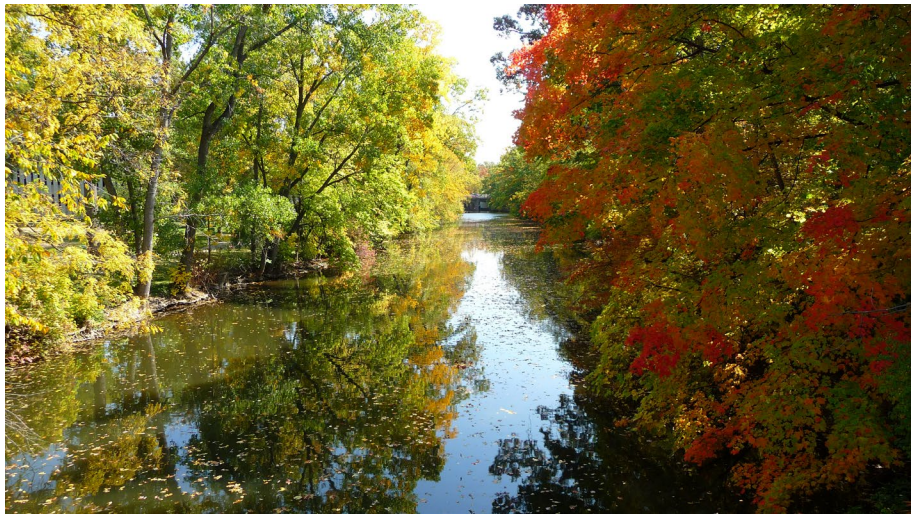
MICHIGAN STATE UNIVERSITY College of Education

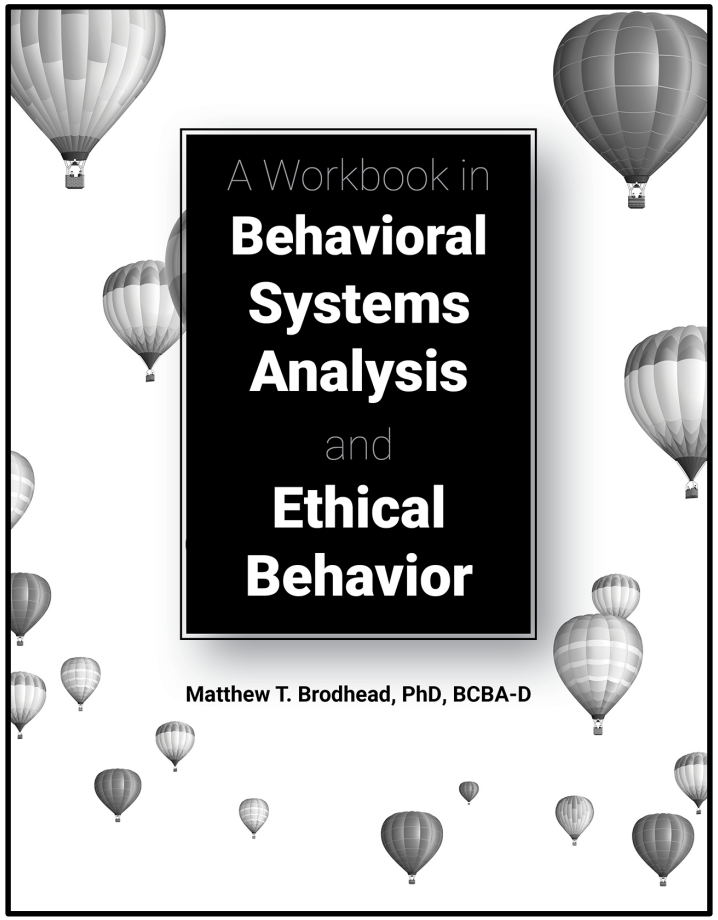
A Behavioral Systems Approach to Improving Ethical Behavior in the Schools

Matthew T. Brodhead, Ph.D., BCBA-D
Assistant Professor
Michigan State University



SPARTANS WILL.

Background



Available at www.BetterABA.com

Presentation Agenda

- Introduce Ethics, Behavioral Systems, and Behavioral Systems Analysis (BSA)
- Provide an example of BSA in the context of interdisciplinary collaboration

Presentation Materials

- 1. Presentation slides
- 2. Decision-making algorithm example
- 3. Checklist for Analyzing Proposed Treatments
- 4. Presentation references

Ethics, Behavioral Systems, and Behavioral Systems Analysis (BSA)

Ethics Defined

- “The emission of behavior in compliance/coordination with the verbally stated rules and behavior-analytic cultural practices guiding practitioner behavior that are espoused by the BACB Code” (Brodhead, Quigley, & Cox, 2018, p. 167)

Ethical Behaviors Are Important

- Many of us provide behavioral services to some population of individuals in educational settings
  - If not, you currently, or may one day, provide supervision to those who do
- Sometimes, our oversight of professional and/or ethical behavior may go by the wayside
  - Especially since time spent promoting these skills may necessarily be obvious or directly support the goals of our students
- However, ethical and professional behaviors should not be ignored

Unethical Behavior

- Unethical behavior may result in
  - 1) harm to students
  - 2) damage to the school's reputation
  - 3) litigation
  - 4) harm to the field of Applied Behavior Analysis (ABA)

Behaving Ethically

- Most of us know what we need to do
  - Very few people wake up in the morning and say, “I’m going to do wrong today”
- The difficulty lies in translating our guidelines into behaviors (processes) that produce desired outcomes in practice
- May occur for a few reasons
  - Training may rely heavily on teaching memorization of the code and case studies that may or may not be relevant to practice
  - Difficulty establishing and maintaining situation-specific behavior that meets standards set by the BACB

Behavioral Systems

- Behavioral systems are the answer
- What is a system?
  - “An organized, integrated unified set of components, accomplishing a particular set of ultimate goals or objectives” (Malott & Garcia, 1987)
- Behavioral systems allow for the standardization of processes and policy that occasion desirable employee behavior
- Systems are purposeful, not random
- Additional reading:
  - Sigurdsson & McGee (2015)
  - Diener, McGee, & Miguel (2009)

Example System: Discrete Trial Instruction

- ***"An organized, integrated unified set of components, accomplishing a particular set of ultimate goals or objectives"***
- Goal: Systematically provide instructional opportunities
- How is accomplished?
  - Standardization of instructional behaviors
  - Train paraprofessionals and provide feedback
  - Observe paraprofessional behavior over time to ensure high treatment integrity
- Discrete trial instruction is a system that must operate smoothly in order for individuals to learn (Brodhead, 2019)

Example System: Functional Analysis

- ***"An organized, integrated unified set of components, accomplishing a particular set of ultimate goals or objectives"***
- Goal: Analyze the environmental variables that may be responsible for the occurrence of problem behavior
- How is this accomplished?
  - Train teachers how to identify potential controlling variables
  - Train teachers to develop and implement experimental conditions
  - Observe implementation over time to ensure high procedural fidelity
- Functional analysis is a system that must operate smoothly in order for teachers to accurately identify variables responsible for problem behavior (Brodhead, 2019)

Systems Abound

- Systems in education, in some cases, are well established
  - DTI and FAs as examples
- The systems necessary for engaging in ethical behavior are often much less clear
- Examples:
  - Make good data-based decisions
  - Be a good collaborator
  - Identify the best function-based treatment
  - Act in the best interest of your students
- When people behave unethically, we often blame them for their own actions
  - *Victim blaming*: saying the victim of the problem is the cause of the problem

The student is always right.

The school is responsible for employee (e.g., teacher and instructor) behavior, because the school has control over the environment.

*Technically, organisms behave, and schools do not.

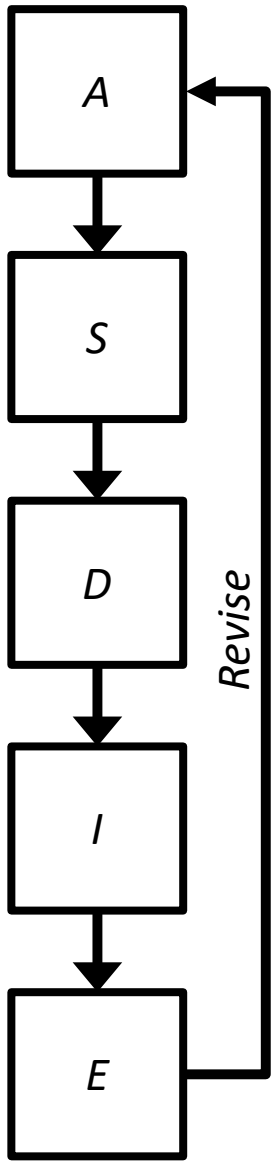
Behavioral Systems

- In an educational setting, **customized** systems of ethical training and supervision must be established
  - to meet the needs of the school
  - to comply with the BACB Code of Ethics
  - to best meet the needs of its students
  - as an antecedent strategy to promote appropriate behavior
  - as an antecedent strategy to prevent misconduct
- The 6 Steps of Behavioral Systems Analysis (BSA) provides a straight-forward tool for making changes and meeting goals within a school

Six Steps of Behavioral Systems Analysis

- Analyze the natural contingencies
- Specify the performance objectives
- Design the system
- Implement the system
- Evaluate the system
- Revise until you reach performance objectives

ASDIER: a tool for systems change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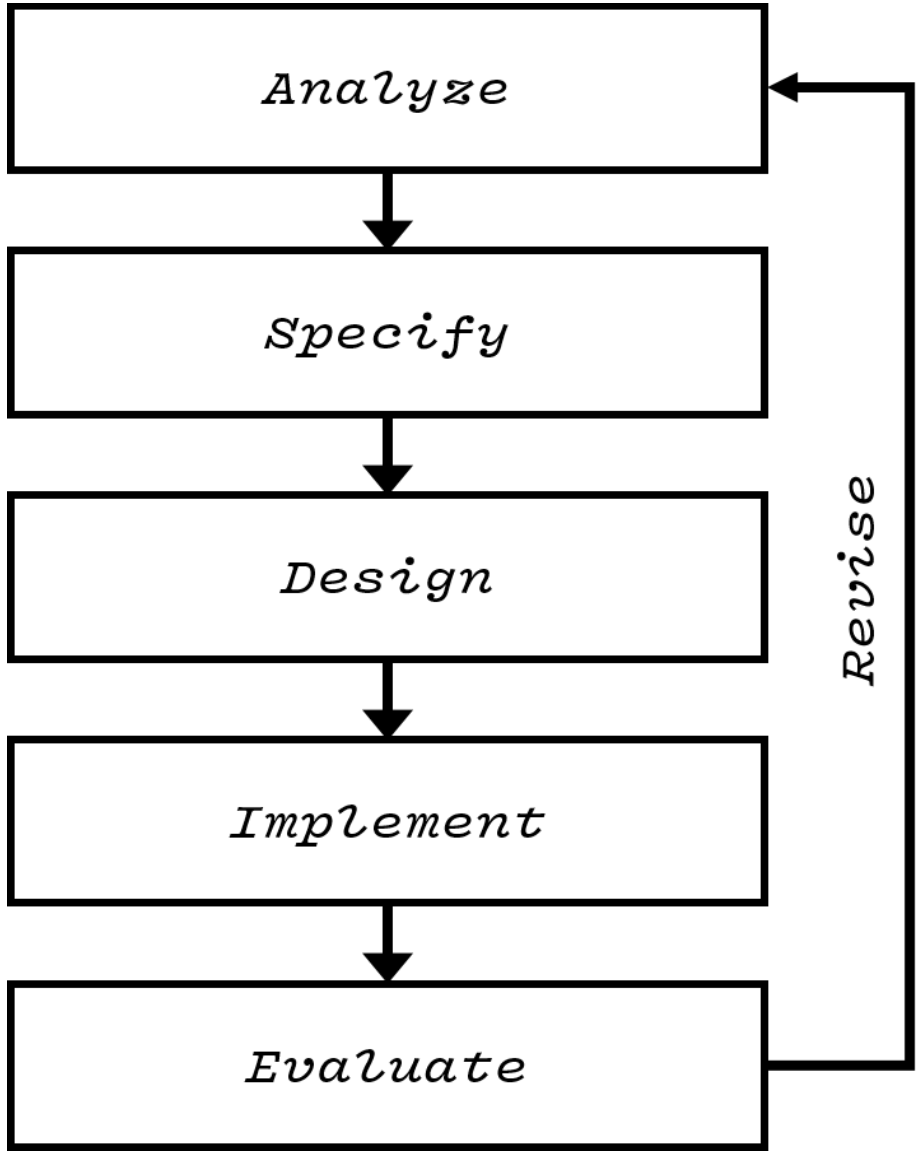
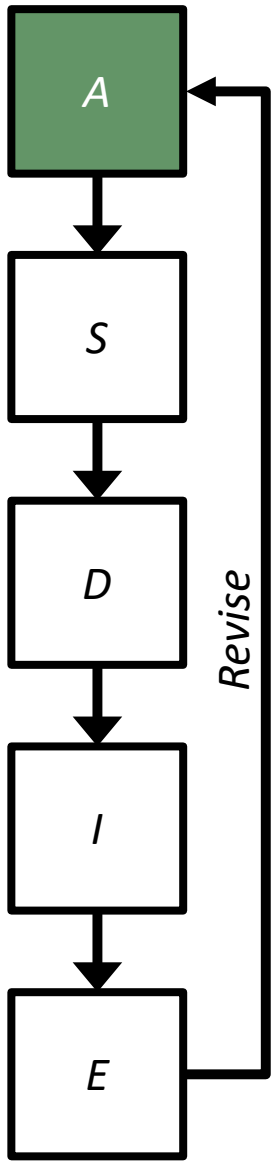
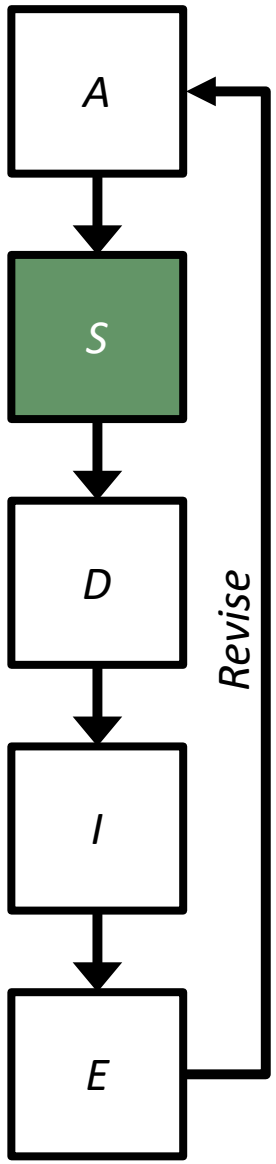

Analyze
Specify
Design
Implement
Evaluate
Revise



Analyze

- Identify the potential behavioral excess or deficit
  - Note the negative effects it has on the environment
- Ensure there is a need for change
- All potential targets for intervention should fall under one or more elements of the BACB Code
  - For example:

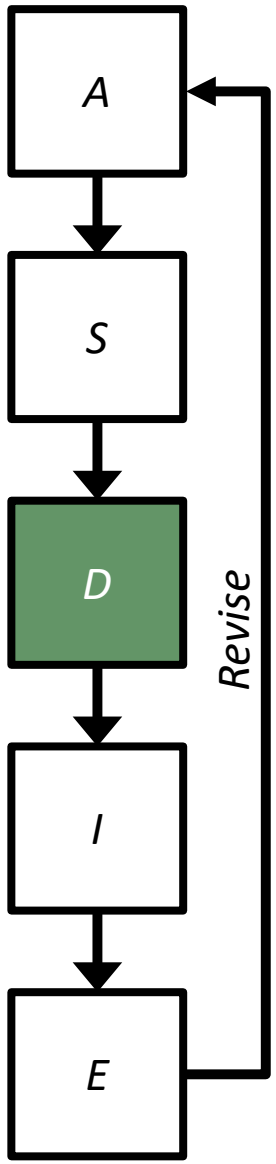
Employee Behavior and Negative Effects	BACB Code Elements(s)
Para note in records that they ran behavioral programs but actually did not.	1.04 (integrity) 2.0 (responsibility to clients)

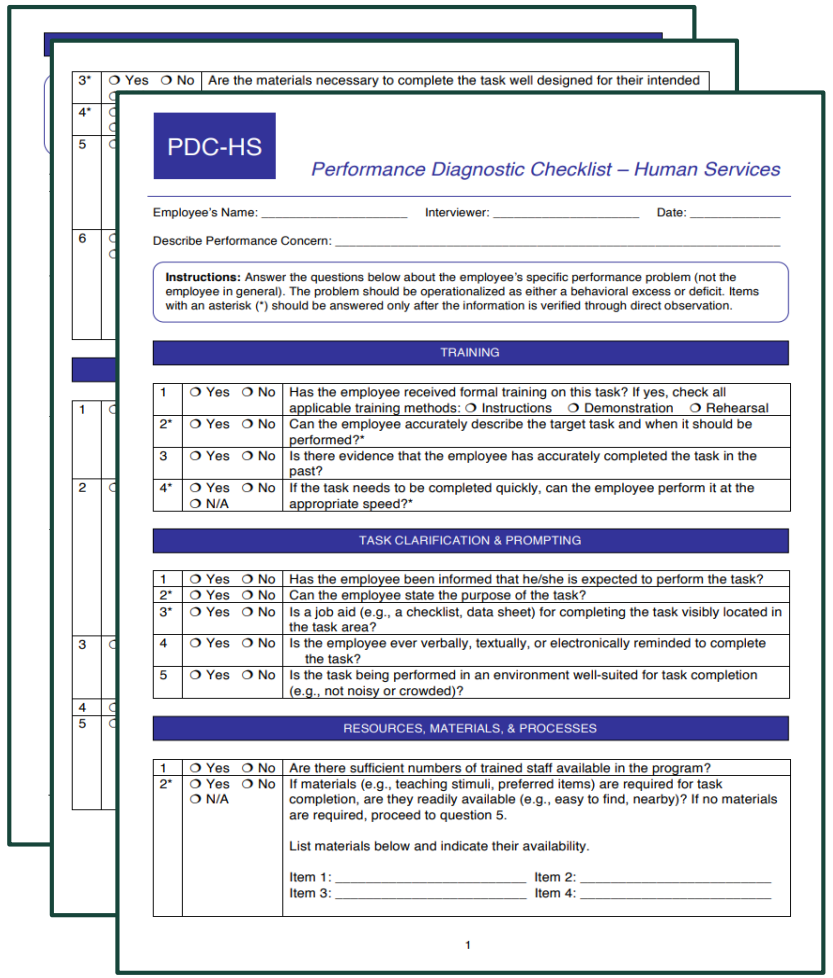


Specify

- Specifying the performance objective is the functional equivalent of stating a goal, just as you would for one of your students.
- Each performance objective should reflect a behavior (or behaviors) that you can measure.
  - For example:
    - "Employees will take data after each instructional trial, 100% of the time."
- Identify your measurement system.
  - Measurement is a critical component of BSA and cannot be ignored.

Design





PDC-HS

Performance Diagnostic Checklist – Human Services

Employee's Name: _____ Interviewer: _____ Date: _____

Describe Performance Concern: _____

Instructions: Answer the questions below about the employee's specific performance problem (not the employee in general). The problem should be operationalized as either a behavioral excess or deficit. Items with an asterisk (*) should be answered only after the information is verified through direct observation.

TRAINING

1	❍ Yes ❍ No	Has the employee received formal training on this task? If yes, check all applicable training methods: ❍ Instructions ❍ Demonstration ❍ Rehearsal
2*	❍ Yes ❍ No	Can the employee accurately describe the target task and when it should be performed?*
3	❍ Yes ❍ No	Is there evidence that the employee has accurately completed the task in the past?
4*	❍ Yes ❍ No ❍ N/A	If the task needs to be completed quickly, can the employee perform it at the appropriate speed?*

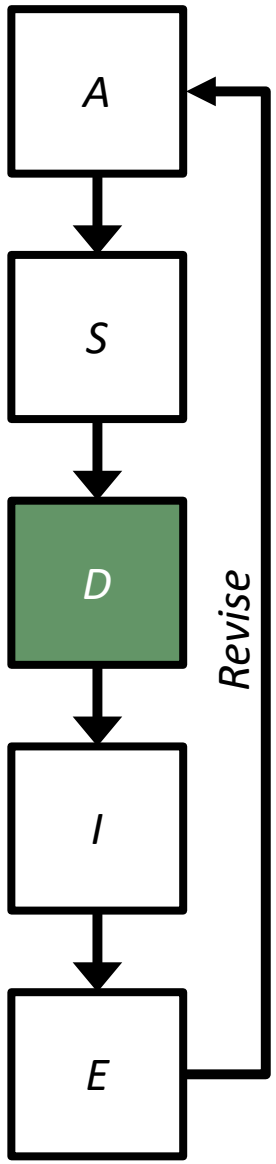
TASK CLARIFICATION & PROMPTING

1	❍ Yes ❍ No	Has the employee been informed that he/she is expected to perform the task?
2*	❍ Yes ❍ No	Can the employee state the purpose of the task?
3*	❍ Yes ❍ No	Is a job aid (e.g., a checklist, data sheet) for completing the task visibly located in the task area?
4	❍ Yes ❍ No	Is the employee ever verbally, textually, or electronically reminded to complete the task?
5	❍ Yes ❍ No	Is the task being performed in an environment well-suited for task completion (e.g., not noisy or crowded)?

RESOURCES, MATERIALS, & PROCESSES

1	❍ Yes ❍ No	Are there sufficient numbers of trained staff available in the program?
2*	❍ Yes ❍ No ❍ N/A	If materials (e.g., teaching stimuli, preferred items) are required for task completion, are they readily available (e.g., easy to find, nearby)? If no materials are required, proceed to question 5. List materials below and indicate their availability. Item 1: _____ Item 2: _____ Item 3: _____ Item 4: _____

1

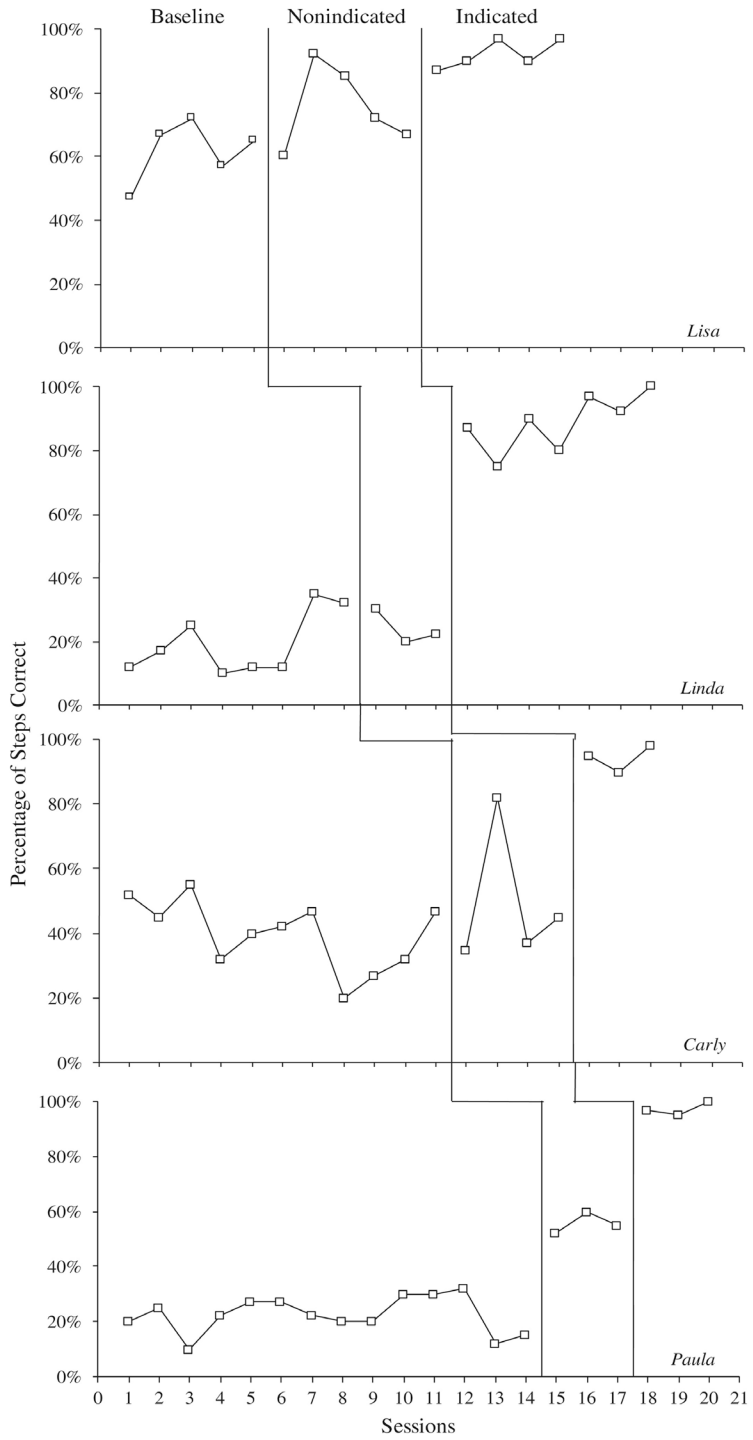


- The Performance Diagnostic Checklist – Human Services (PDC-HS) is a tool that can help identify deficits, and subsequent interventions, for undesirable employee performance.
  - Based on the PDC designed by Austin (2000)
  - Evaluates performance in four main areas:
    - Training;
    - Task clarification and prompting;
    - Resources, materials, and processes;
    - Performance consequences, effort, and competition

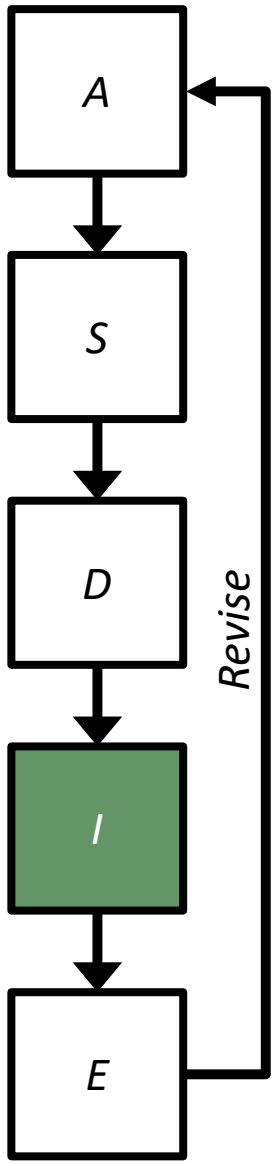
INTERVENTION PLANNING

Instructions: Each item scored as *NO* on the PDC-HS should be considered as an opportunity for intervention with priority given to areas in which multiple items are endorsed. Interventions may be implemented concurrently or consecutively, with the latter option being preferred for settings in which staff resources are limited. Sample interventions and illustrative literature citations for each area are provided below.

Area	Item #	Sample Intervention(s)	Literature Citations
Training	1, 2, 3, 4	Behavioral skills training (i.e., instructions, modeling, rehearsal, feedback)	• Barnes, Dunning, & Rehfeldt (2011) • Nabeyama & Sturmey (2010)
		Improved personnel selection	• Gatewood, Feild, & Barrick (2008)
Task Clarification & Prompting	1, 2	Task clarification & checklists	• Cunningham & Austin (2007) • Gravina, VanWagner, & Austin (2008) • Bacon, Fulton, & Malott (1982)
	3, 4	Prompts	• May, Austin, & Dymond (2011) • Petscher & Bailey (2006)
	5	Change/alter task location	• Green, Reid, Passante, & Canipe (2008)
Resources, Materials, & Processes	1	Adjust staffing	• Strouse, Carroll-Hernandez, Sherman, & Sheldon (2003)
	2, 3, 4	Improve access to (2), redesign (3), or reorganize (4) task materials	• Casella, Wilder, Neidert, Rey, Compton & Chong (2010)
	5, 6	Reassess task process and personnel	• Diener, McGee, & Miguel (2009) • McGee & Diener (2010)
Performance Consequences, Effort, & Competition	1	Increased supervisor presence	• Brackett, Reid, & Green (2007) • Mozingo, Smith, Riordan, Reiss, & Bailey (2006)
	2	Performance feedback	• Arco (2008) • Green, Rollyson, Passante, & Reid (2002)
	3	Regularly highlight task outcomes	• Methot, Williams, Cummings, & Bradshaw (1996)
	4	Reduce task effort	• Casella, Wilder, Neidert, Rey, Compton, & Chong (2010)
	5	Reduce aversive task properties	• Green, Reid, Passante, & Canipe (2008)

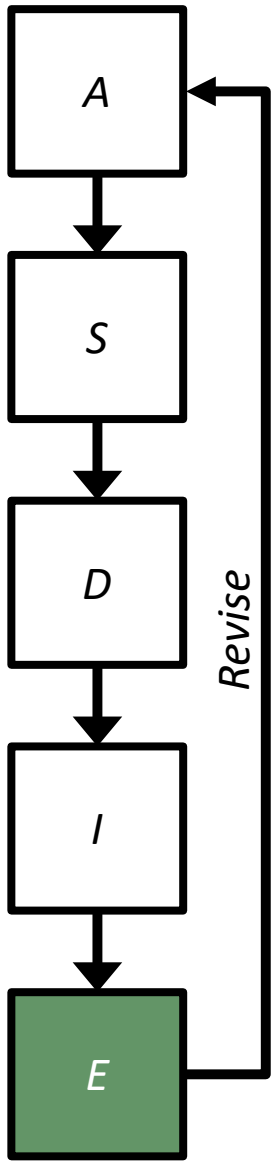


Bowe, M., & Sellers, T. P. (2018). Evaluating the Performance Diagnostic Checklist-Human Services to assess incorrect error-correction procedures by preschool paraprofessionals. *Journal of Applied Behavior Analysis, 51*, 166-176.



Implement

- Implement the intervention, and be prepared to overcome any barriers that may arise during the implementation process.
  - If you're having trouble identifying what could go wrong, think back on your previous experiences as a behavior analyst working under similar conditions.
- Examples:
  - Employee turnover
  - Observer drift in behavioral definitions
  - Competing demands for your time

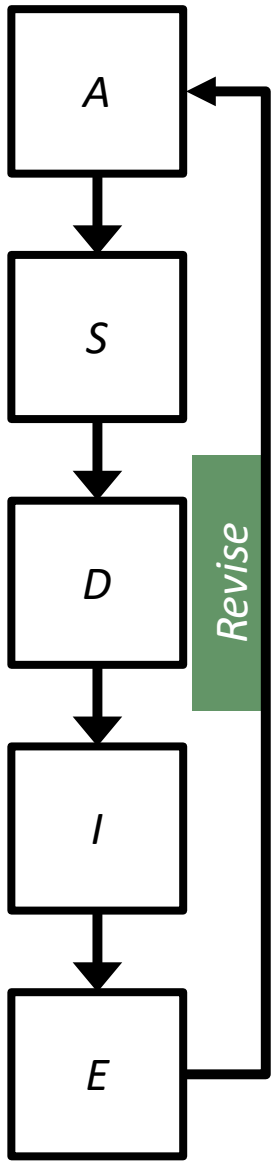


Evaluate

- Indicate how you plan to ensure data analysis happens and how often it will happen.
- Indicate who will be involved in the data analysis process.
- Indicate how you plan to display the data.
- Describe the potential challenges that may arise in the data collection/analysis process and how to resolve them.

Challenges That May Arise	Potential Solutions
1. There may be more pressing issues to discuss at meeting. 2. Other demands may compete with collecting and graphing data.	1. Budget time in the agenda for discussion and share data electronically for comment. 2. Delegate this task in advance.

Revise



- Use the data you collect in the previous step (Evaluation) to inform the revisions you make.
- Good interventions drift into mediocrity, and some can drift quite quickly.
- You should always be on the lookout for ways to make your system better and more efficient.

Six Steps of Behavioral Systems Analysis

- Analyze the natural contingencies
- Specify the performance objectives
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ASDIER: a tool for systems change

BSA Example

Behav Analysis Practice (2015) 8:70–78
DOI 10.1007/s40617-015-0042-7

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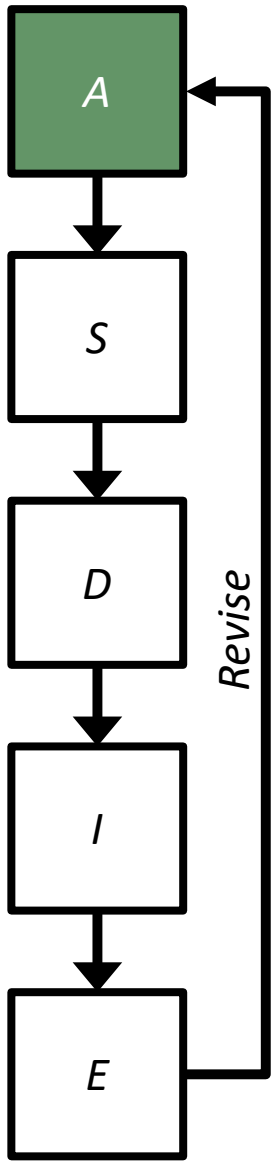
Association for Behavior Analysis International

DISCUSSION AND REVIEW PAPER

Maintaining Professional Relationships in an Interdisciplinary Setting: Strategies for Navigating Nonbehavioral Treatment Recommendations for Individuals with Autism

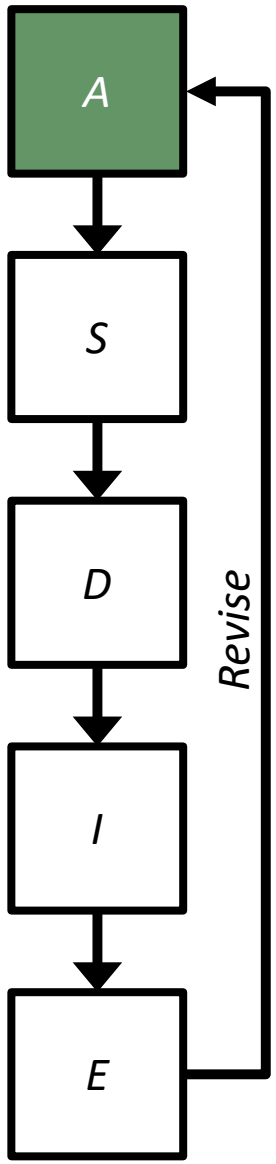
Matthew T. Brodhead



Analyze

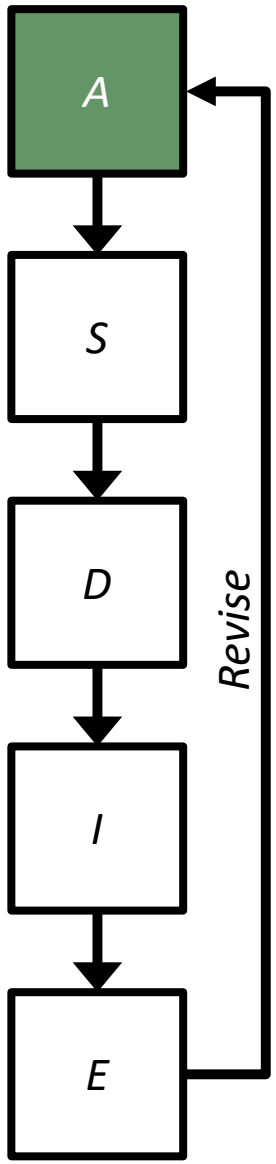
Interdisciplinary: “involving two or more academic, scientific, or artistic disciplines” (Merriam-Webster, 2014)

- “Interdisciplinary involves the combining of two or more academic disciplines into one activity. It is about creating something new by crossing boundaries, and thinking across them” (Wikipedia, 2014, emphasis mine)



Analyze

- Though collaborative skills are important, they are rarely addressed in ABA pre-service and in-service training (Kelly & Tincani, 2013).
- This is concerning, since collaboration amongst team members can improve consumer outcomes (Hunt et al., 2003).



Analyze

When a treatment that is not behavior-analytic is proposed, we may

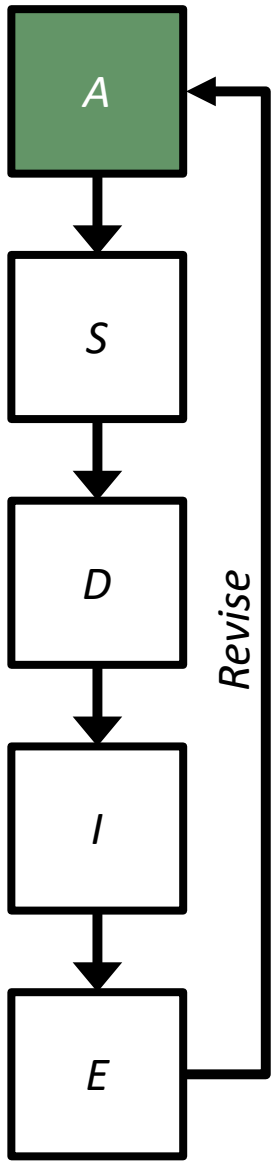
- accept the treatment

or

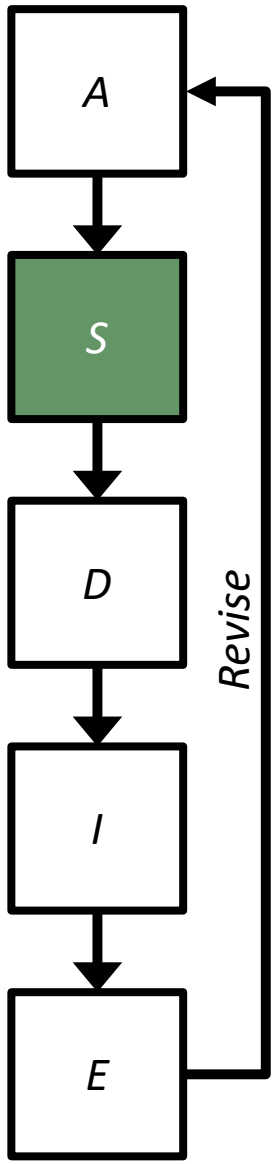
- reject the treatment
- suggest an alternative treatment

Old BACB Code of Conduct 9.01: "The behavior analyst should promote the application of behavior principles in society by presenting a behavioral alternative to other procedures or methods."

Analyze



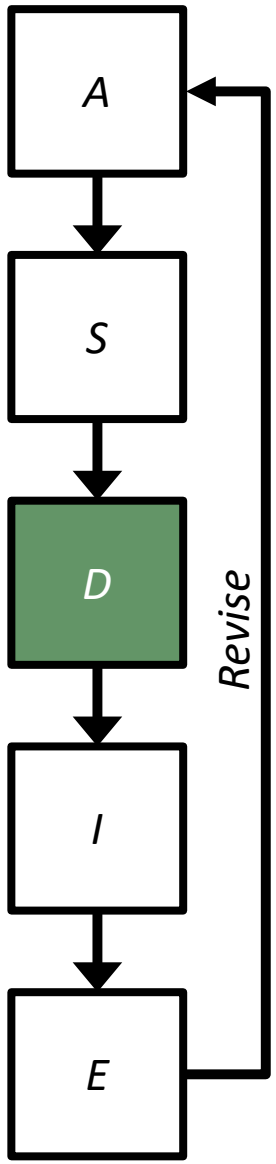
- The nature of addressing non-behavioral treatments places the behavior analyst in a tough position
  - We are obligated to promote student safety and the science of human behavior in the best interest of our students
  - Assuming student safety is not compromised, excessive or inappropriate complaints may erode clinical relationships and possibly limit a student's access to needed behavior-analytic services
    - This may be especially problematic if questionable treatments are actually effective or empirically supported



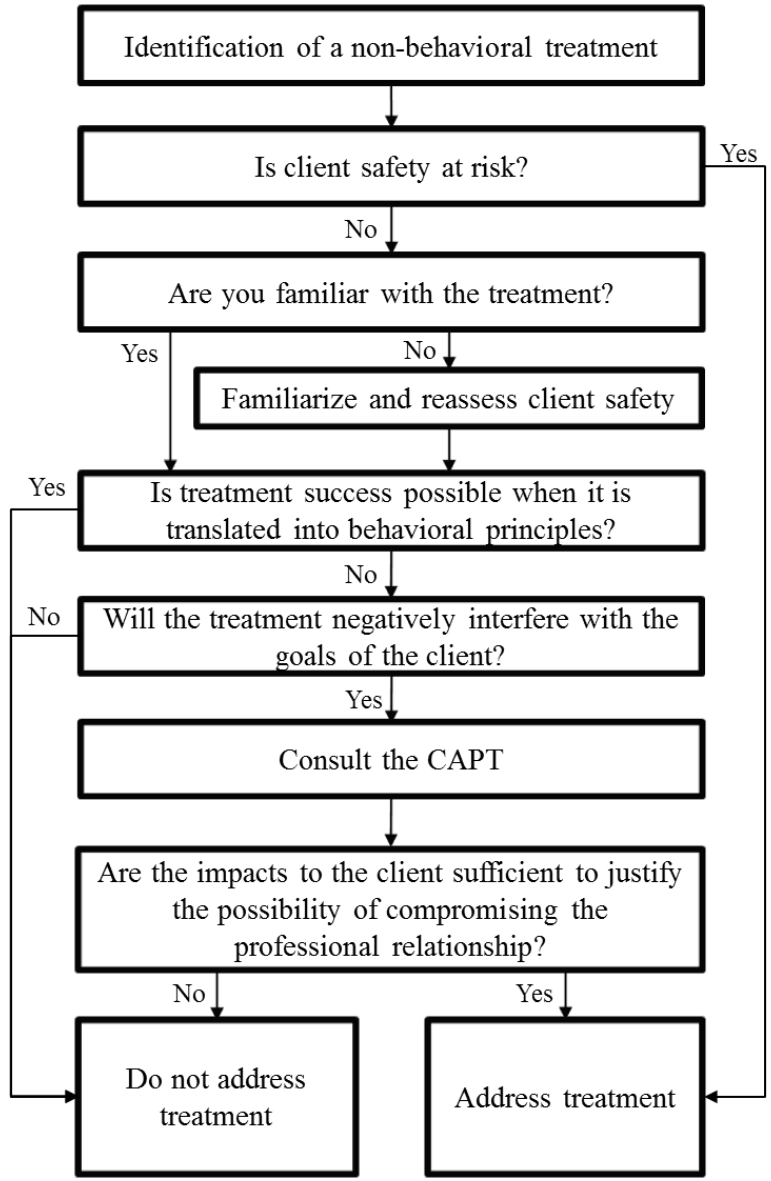
Specify

- Behavior analysts should engage with colleagues in a manner that maintains and improves a working relationship
- Behavior analysts should act in the best interest of their students

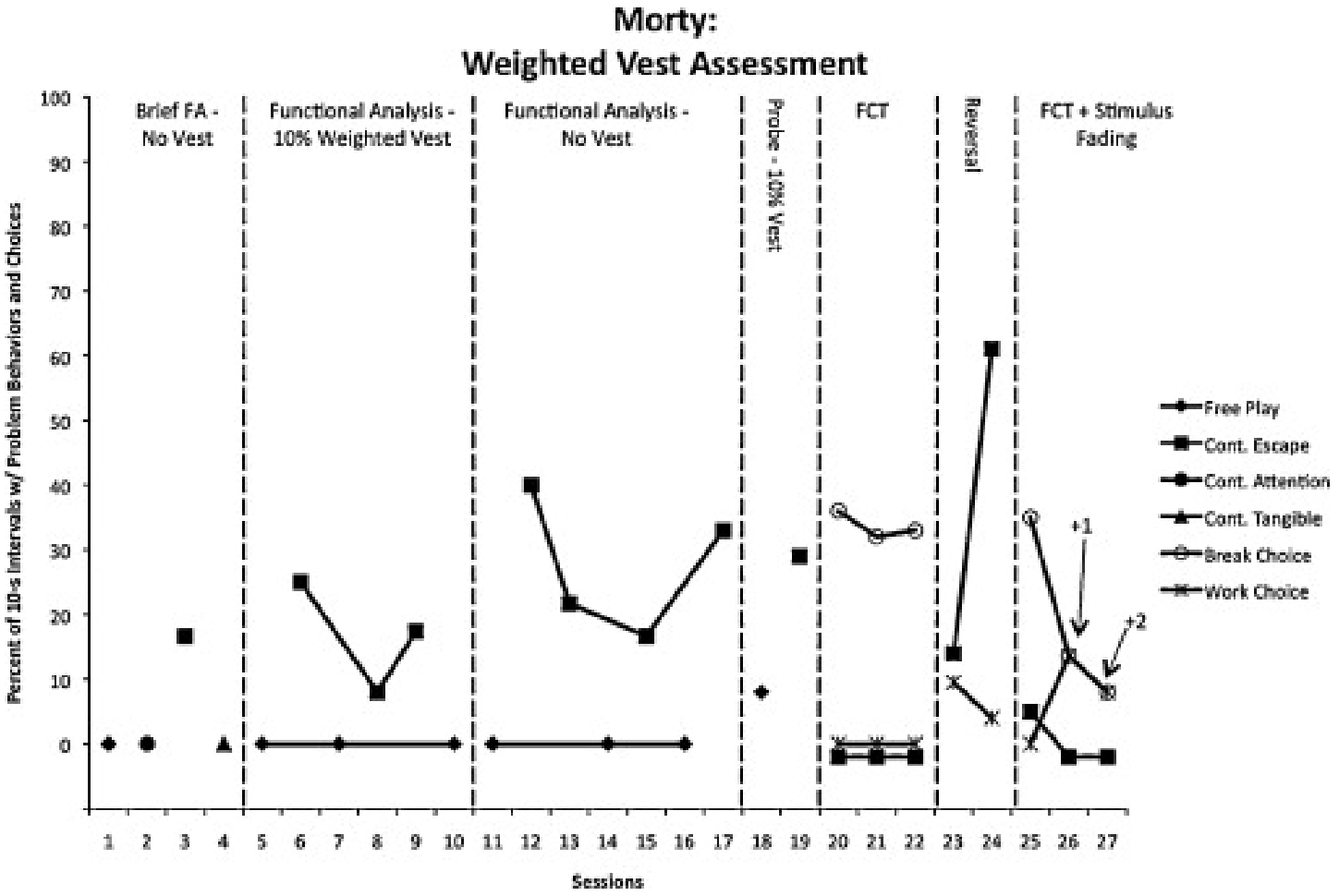
Design



- One way to promote ethical behavior is to standardize expectations and behaviors for employees to engage in
- A decision-making algorithm (DMA) is one form of standardization
  - A DMA is typically portrayed as a decision tree, flow-chart, or some other graphical format
  - By answering a series of guided questions, the user is guided through the flow-chart towards a specific answer
  - Also known as “process systems”

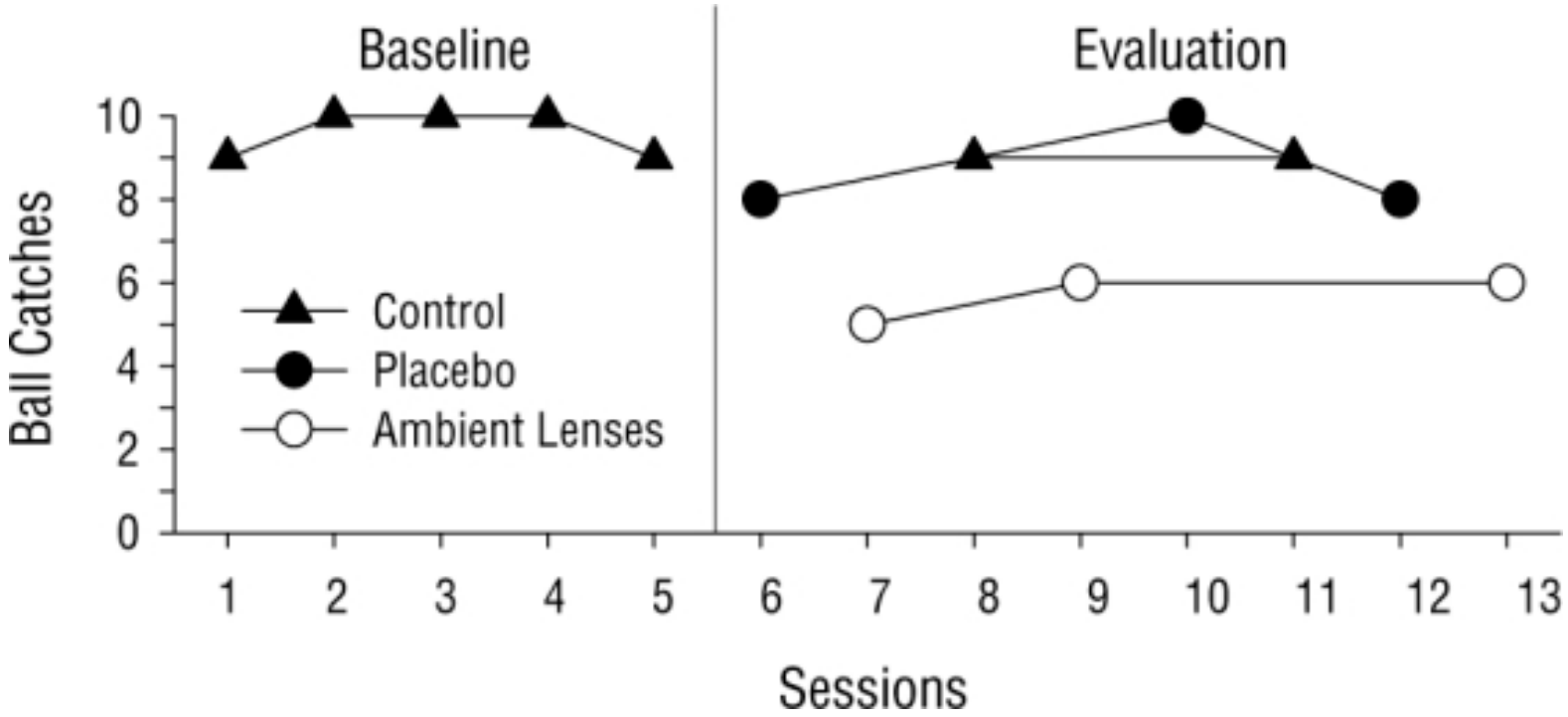

Identification of a non-behavioral treatment
Is client safety at risk?
Yes
No
Are you familiar with the treatment?
Yes
No
Familiarize and reassess client safety
Yes
Is treatment success possible when it is translated into behavioral principles?
No
No
Will the treatment negatively interfere with the goals of the client?
Yes
Consult the CAPT
Are the impacts to the client sufficient to justify the possibility of compromising the professional relationship?
No
Yes
Do not address treatment
Address treatment

Weighted Vests



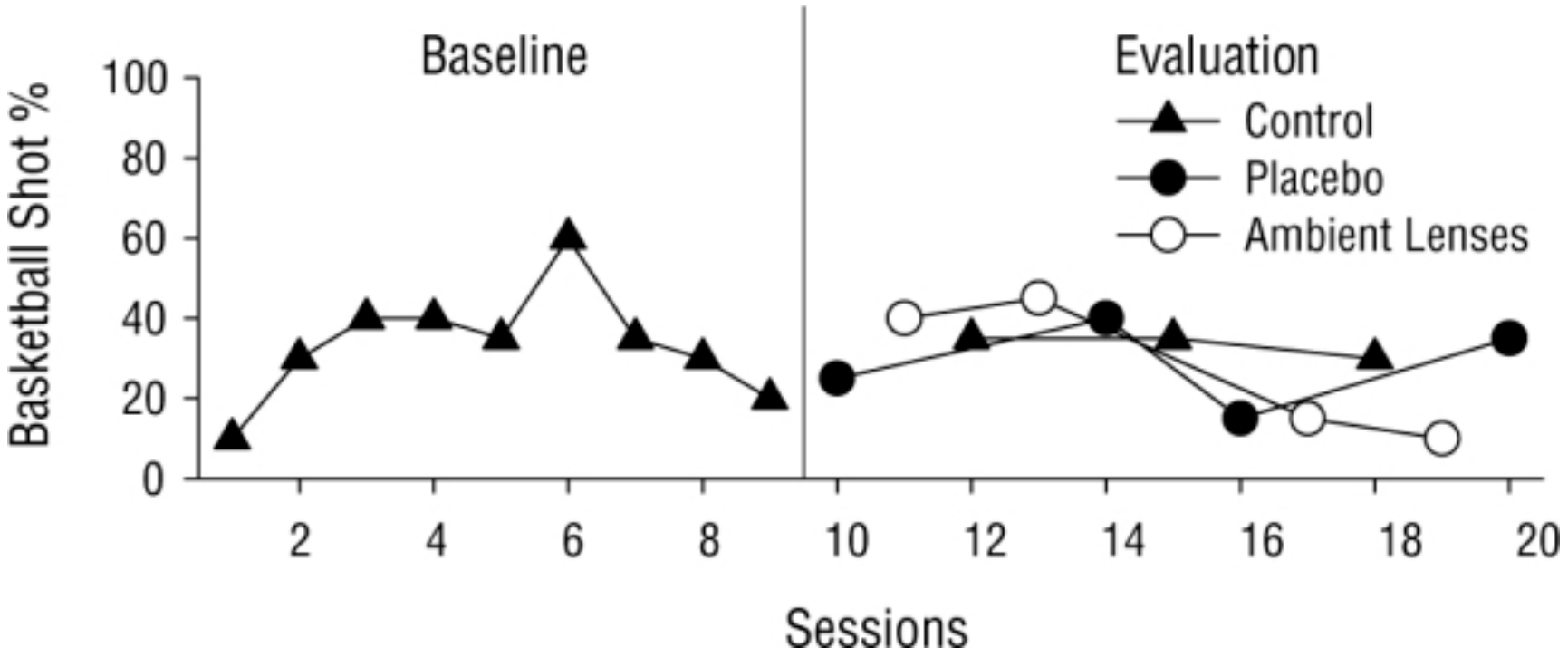
From Quigley et al. (2011)

Ambient Prism Lens



From Chok et al. (2010)

Ambient Prism Lens



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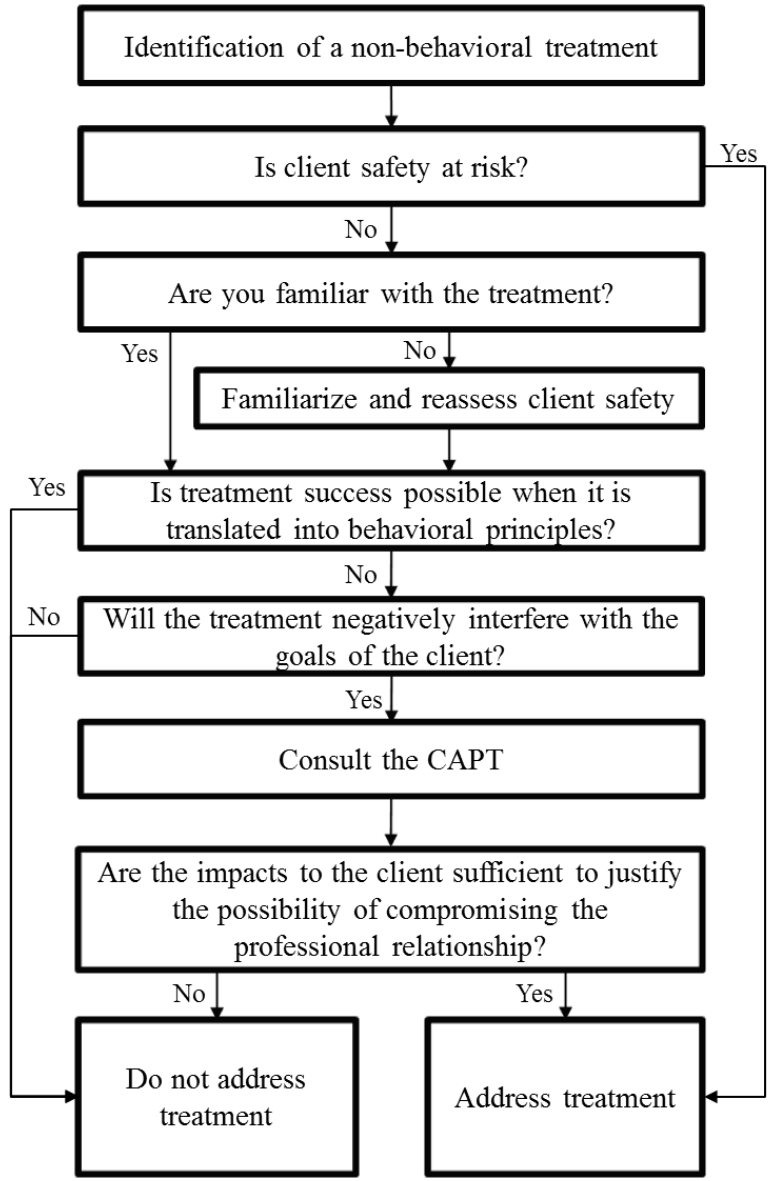
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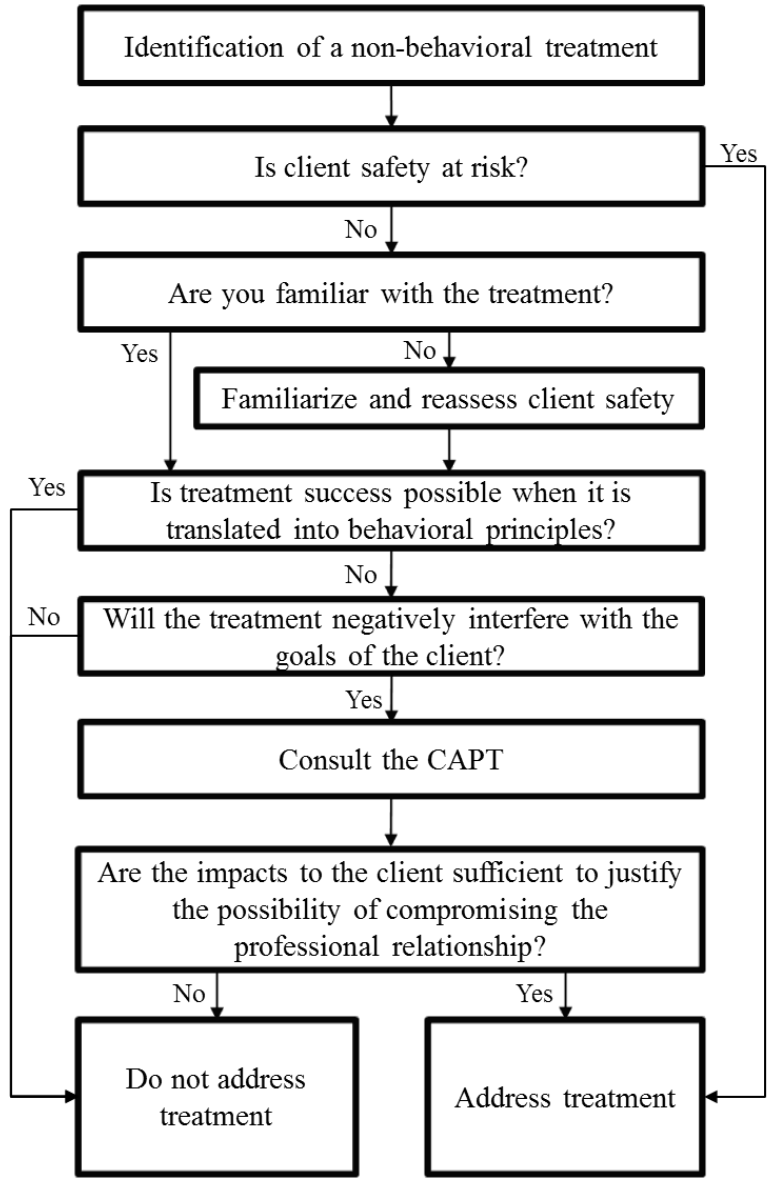
Checklist for Analyzing Proposed Treatments

Domain and Category	Probability
1. Function-based Treatment	
Treatment addresses the function of behavior	Low / Medium / High / NA
Treatment will not increase challenging behavior	Low / Medium / High / NA
Treatment will result in the acquisition of an alternative replacement behavior	Low / Medium / High / NA
2. Skill Acquisition	
Treatment will result in acquisition of functional skills	Low / Medium / High / NA
Treatment does not increase inappropriate behaviors	Low / Medium / High / NA
Treatment does not negatively affect other acquired skills	Low / Medium / High / NA
3. Social Outcomes	
Treatment promotes inclusion into social situations	Low / Medium / High / NA
Treatment results in the acquisition of socially appropriate skills	Low / Medium / High / NA
4. Data Collection	
Data will be collected	Low / Medium / High / NA
Data collection captures target behavior(s) of interest	Low / Medium / High / NA
Data collection will capture treatment efficacy	Low / Medium / High / NA

Checklist for Analyzing Proposed Treatments

Domain and Category	Probability
5. Treatment Integrity	
Stakeholders can be trained to implement the treatment	Low / Medium / High / NA
Treatment is likely to be implemented consistently	Low / Medium / High / NA
6. Social Validity	
Treatment corresponds with the short term goals of the stakeholders	Low / Medium / High / NA
Treatment corresponds with the long term goals of the stakeholders	Low / Medium / High / NA
The client will favor treatment	Low / Medium / High / NA
The form of reinforcement is appropriate	Low / Medium / High / NA
The targeted outcomes are socially acceptable	Low / Medium / High / NA
7. Resources	
Treatment does not require significant financial resources	Low / Medium / High / NA
Treatment does not require significant time resources	Low / Medium / High / NA

Note: outcomes may be weighted differently depending on the needs of the client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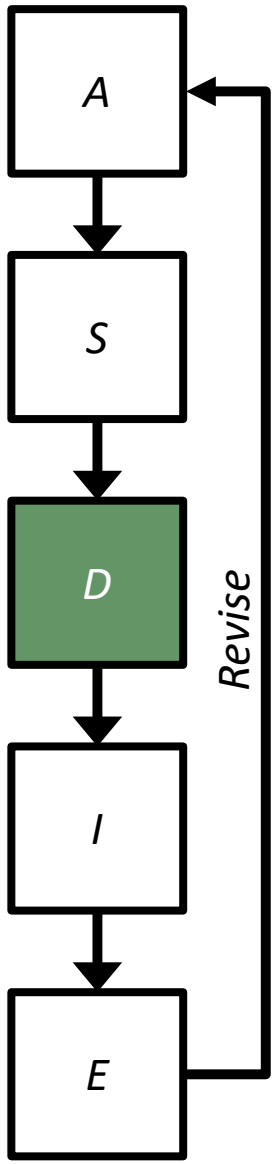


- Newhouse-Oisten, Peck, Conway, and Frieder (2017) proposed an alternative model to evaluating treatments
- This model is specific to prescription medication recommendations, but it may also be useful beyond that
- This model stresses that all treatment providers are aware of all types of treatments that are being implemented at all times

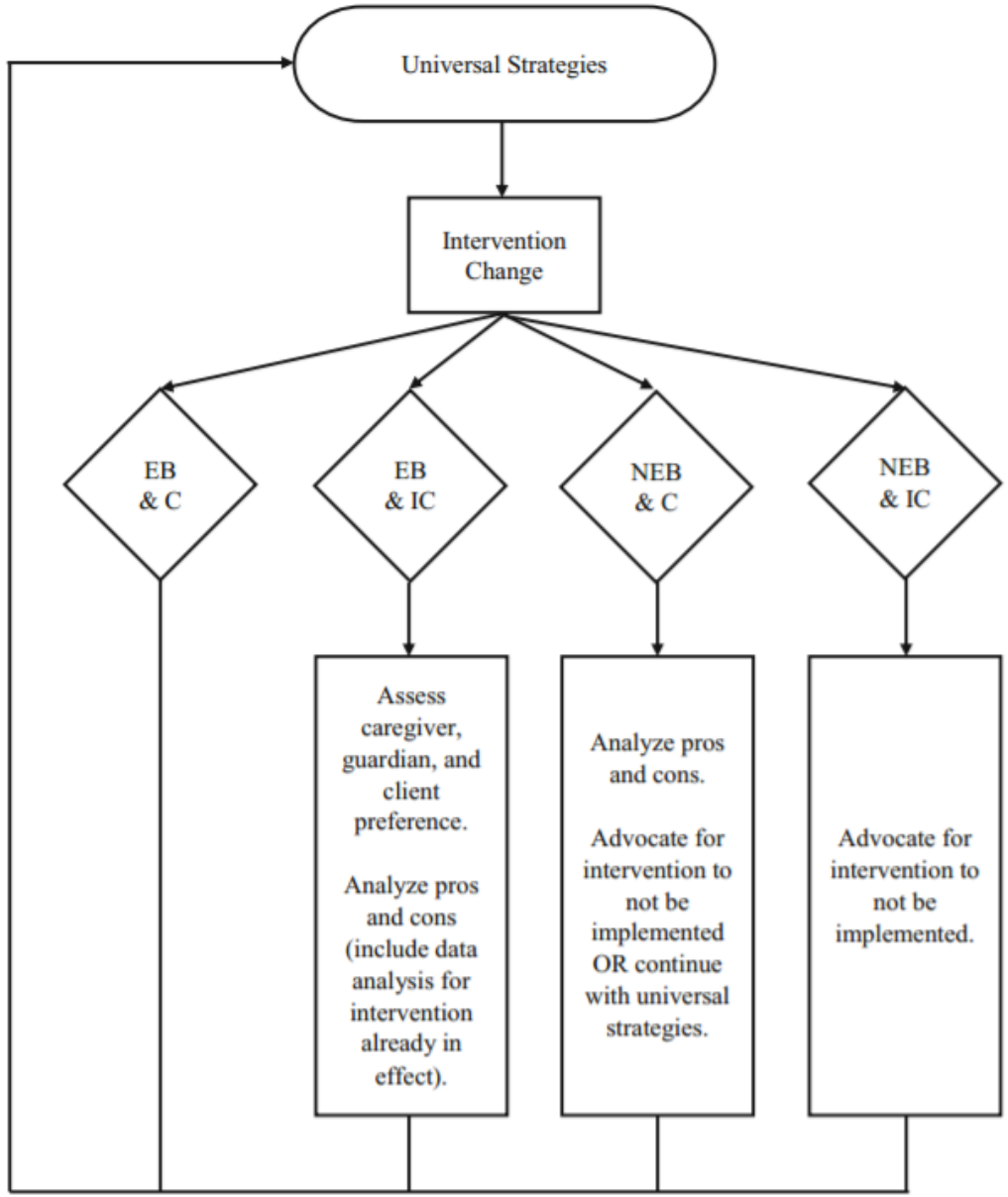
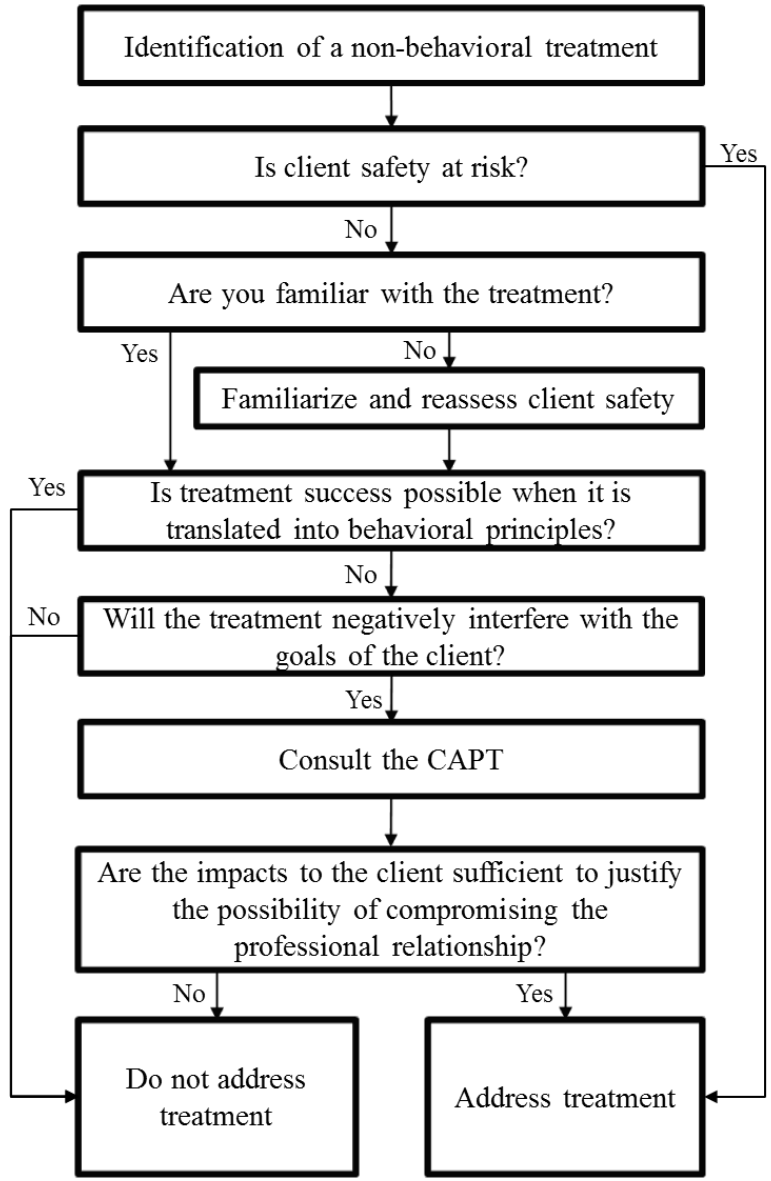
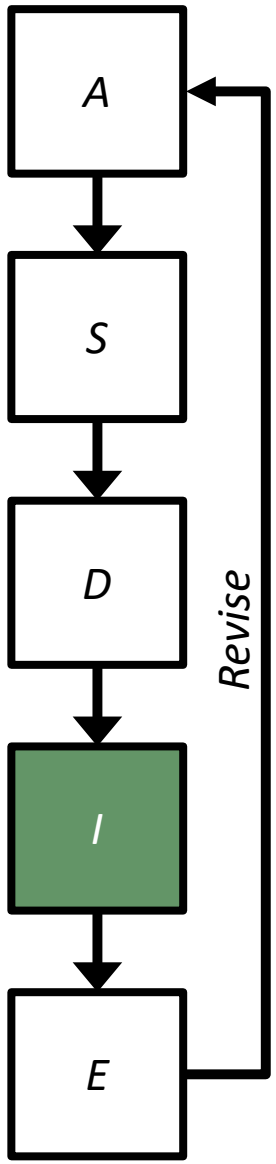


Fig. 1 Decision-making process for ensuring intervention compatibility and use of evidence-based interventions. *EB* evidence-based, *NEB* not evidence-based, *C* compatible, *IC* incompatible

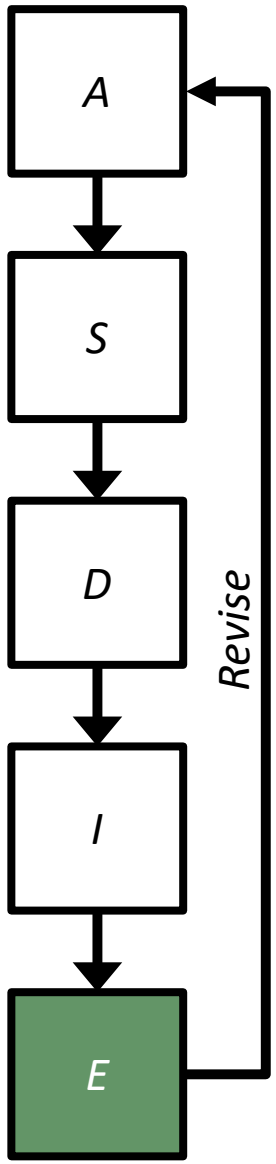
Newhouse-Oisten et al. (2017)


Identification of a non-behavioral treatment
Is client safety at risk?
Yes
No
Are you familiar with the treatment?
Yes
No
Familiarize and reassess client safety
Yes
Is treatment success possible when it is translated into behavioral principles?
No
No
Will the treatment negatively interfere with the goals of the client?
Yes
Consult the CAPT
Are the impacts to the client sufficient to justify the possibility of compromising the professional relationship?
No
Yes
Do not address treatment
Address treatment



Implement

- If you were to implement this system in your school, what barriers would you expect to encounter?
  - Teachers may need explicit training on appraising non-behavioral research literature
  - Teachers may stop using algorithm
  - Dynamic nature of interdisciplinary collaboration may require a decision-making framework that is different than what is proposed



Evaluate

- If your process is a model of decision-making, monitor adherence to the process
  - Percentage of correct responses
  - Hypothetical or real-life scenarios
- Social validity from consumers (Luiselli, 2015)

Conclusion

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Contact

- Matt Brodhead
  - mtb@msu.edu

- Visit www.mattbrodhead.com