Linking assessment to intervention

Data from Interview and Environmental Observation

- 80% students learned lesson but not client
- Short transitions (minimal time on management)
- Few checks from peers (well-behaved class)

If any no

Individual intervention

DATA from STEEP

Individual academic: Individual Behavior

Classwide intervention

Scores below district/benchmarks: 9 check slopes 80% academic Tx

Train and do Treatment Trials with teacher in classroom

Example #1

- Reiko, a second grader, is referred by the teacher due to behavior problems.

Reiko’s data...

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
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<tbody>
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Hypothesis statement:
Are there certain times or situation that you would like to observe behavior that the teacher can set up?
1. 2. 3.

Review Interview data and put information in the relevant columns:

Classwide Screening using CBM and percentage of disruptive behavior
Assessing student performance with peers in the classroom setting
GOAL of FA
Find operant function of the problem behavior
(DISRUPT FOR TEACHER ATTENTION)
Weaken the maintaining contingency for problem behavior
(NO OR LITTLE TA FOR DISRUPTION)
Strengthen a concurrent available alternative
more preferred response
(TA FOR QUIET WORK, RAISE HAND)

Typical functions

<table>
<thead>
<tr>
<th></th>
<th>Get/Access</th>
<th>Escape/Avoid</th>
<th>Sensory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer/adult social</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Activities/tasks</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Tangibles</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
</tbody>
</table>

FBA methods

1. **Indirect methods** based on self-report
   Interviews, Rating Scales, or Questionnaires

2. **Descriptive methods**
   Direct observation of client behavior and environmental events in natural settings to formulate hypothesis about the operant function of inappropriate behavior.

More Simply....

**Behavior says:**
TALK TO ME!
I WANT THAT!
I DON'T WANT TO DO THIS!

**Teacher says:**
I WILL TALK TO YOU WHEN YOU ARE BEING "GOOD"
YOU CAN HAVE THAT FOR BEING "GOOD"
YOU CAN HAVE A BREAK AFTER DOING SOME OF THIS IN AN EASIER WAY

By taking the time to understand what the child is attempting to say with the behavior, it provides an opportunity to teach the child new, more appropriate ways to get what he or she wants.

STEPS of FBA Process

1. Collect Information (records, interview).
2. Collect direct observation data (descriptive, Brief observational tests or functional analysis).
3. Developing hypothesis statement with ABC’s.
4. Develop treatment options
5. Conduct brief treatment trials (contingency reversals) to validate treatment if possible.

How to conduct
A descriptive final assessment

Materials: recording observation sheet, watch

Record:
- **Dis** = disruptive behaviors such as talking out, out of seat, bothering/touching others
- **PA** = peer attention or interaction such as talking with, playing with, bothering, getting peers to laugh, signal to each other
- **TA** = teacher attention could be positive (help, praise, touch, prompt) or negative (reprimand, name on board, moving away from peers)
- **Off task** = not completing work or following directions.
a) Mark the activity (antecedent or setting): transition, teacher led lecture, independent seatwork, group work etc.

b) Observe the child for 10 seconds.

c) Mark the appropriate codes in BOX 1 if you see any of the four behaviors occurring at any time during that 10 seconds.

d) Observe the child for another 10 seconds and record any of the 4 behaviors in BOX 2 if they are observed during the 10 second interval.

---

**Calculate Conditional probabilities**

Witt page 131

Percentage of times behavior was followed by a consequence.

Calculate: # times bx was followed by C/ times bx occurred

Example:

Count # disruptive Bx 35

# of Dis Bx in box with TA and after TA 18

\[
\frac{18}{35} \times 100\% = 55\%
\]

**THIS SAYS:**

55% of the time disruptive behavior was followed by teacher attention.

---

**Third FBA method…**

**Functional Analysis (extended or brief)**

Specific procedures in which environmental variable are experimentally manipulated in isolation in order to identify maintaining factors that maintain or suppress behavior for the purpose of developing effective treatment.
Extended FA

Functional Analysis

Advantages:
- Direct and Objective measure
- High degree of control for more accurate identification
- Brief FA has been found to be effective
- Direct link to treatment

Limitations:
- Complex and time consuming
- If analog setting, results may not generalize to natural setting
- Potential risk of teaching a new function
- May not test any or all potential reinforcers
- Ethical considerations e.g., creating situations for misbehavior

Brief Functional Assessment

A one time shot at experimentally manipulating only one environmental variables at a time without replication to identify maintaining factors that maintain behavior

Hypothesis development after collecting FBA data

Review FBA data

Develop statements about factors that contribute to occurrence & maintenance of problem behavior

For Reiko...used interview and descriptive..

REIKO

Antecedent | Behavior | Consequence
---|---|---
Independent seatwork | Talking out | Peer attention
Hallways |Bothering others by laughing | Teacher attention

Hypothesis:
During transitions and seatwork, Rieko's frequent talking out or bothering others behaviors is successfully getting him a lot of peer attention.

Next decide on treatment options....
Treatment design Guidelines

a. Design antecedent strategies to make triggering antecedents ineffective.

   - Eliminate so antecedent no longer serves as a trigger.
   - Alter so that they make behavior /consequence unnecessary (e.g., less difficult work)

b. Select and teach desired behaviors that is:
   - Easy to do → Just as efficient as problem behavior
   - Acceptable
   - Recognized
   - likelihood will contact reinforcement-- Just a successful as problem behavior
   - Successful in many settings

c. Design consequence strategies to make maintaining consequences for behavior problem irrelevant.

   - Alter or weaken current maintaining consequence so less reinforcing (matching law)
     - Quality or value, amount, rate, immediacy
   - Eliminate current maintaining consequence so they no longer are present

   And make consequences for desired behavior relevant.

   - Reverse current maintaining consequence
     → Give what child wants for replacement behavior

Brief Intervention for Teacher Attention

Observation Results: Getting teacher reprimand every 3 minutes for inappropriate bx.

Hypothesis: Wants teacher attention

Test: Signal the teacher to give praise directly to student or class every 3 minutes

   Student raises hand after every 5 seconds for teacher review

   Self monitoring with matching

Brief Intervention for Peer Attention

If complete so many problems can

- work with a peer
- tutor a peer
- sit near a peer
- class gets one minute free time
- pass out free homework pass or one coupon
- write problem on board
- Peers earn free time for ignoring others

Brief Intervention for ESCAPE

Alter task

If complete so many correct problems can

- take a break
- Choose next more preferred activity
- earn break time
- Earn a free assignment

For Reiko.....
Antecedents:
- Hallways
- Independent work
- Transitions

Can you change or prevent antecedents?

Problem Behaviors:
- Talking out
- Bothering others

Desirable Behaviors:
Can they do it?

Ways to change the context to make problem behavior unnecessary?
- Clarify rules and teach
- Written contract
- Coaches
- Change schedule

Ways to prevent the problem behavior?
- Precorrection
- Modify task
- Extra assistance

Ways to increase expected behavior:
- Practice with support
- Self-management program

What should happen when the problem behavior occurs?
- Reward/Punish
- Contact parents
- Reprimand
- Reduce privilege
- Time out
- Office

What should happen when desirable behavior occurs?
- Reward program
- Praise
- Positive peer interactions

Potential blockers
- Teacher does not want to make that child look special or bribe the child by changing consequences for good behavior.
- High frequency of behaviors gets the child a lot of attention.
  - e.g., talking out gets many reprimands, gets to answer sometimes, peers laugh. Baseline data shows an average of every 2 minutes there is teacher attention.
- Aggressive acts scares the teacher and/or makes the teacher look bad
  - e.g., throwing desk gets child out of work, pretty soon teacher just ignores the child when he is not working as long as he is quiet.

Advantages of Brief treatment validation tests
- Teacher sees and makes the difference
- Teacher runs the show (trained)
- Direct observation
- Treatment validity
- Reduces need to problem solve during interview

NEXT STEP: Intervention design and progress
Review data

- Reiko, a second grader, is referred by the teacher due to behavior problems.

### Hypothesis Statement

Are there certain times or situations that you would like to observe behavior that the teacher can set up?

1. 
2. 
3. 

### Environmental Context Observation Data Recording Sheet

From 40 minute class observation

<table>
<thead>
<tr>
<th>Task</th>
<th>Basic Teaching Steps Conducted?</th>
<th>Was Task Learned?</th>
<th>Was Most Time Spent on Academic Rather Than Class Management?</th>
<th>Was Academics Appropriately Taught?</th>
<th>Was Positive Behavioral Expectations Taught?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES a. Clear Objectives</td>
<td>YES b. Told how to do task with steps</td>
<td>YES c. Teacher modeled</td>
<td>YES d. Checked for understanding</td>
<td>YES e. Short practice for all students</td>
</tr>
<tr>
<td></td>
<td>YES h. Evidence of feedback for work</td>
<td>YES i. Short practice for all students</td>
<td>YES j. Evidence of feedback for work</td>
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### Data from Interview and Environmental Observation

- 80% students learned lesson but not client
- Short transitions (minimal time on management)
- Few checks from peers (well-behaved class)

### Decision Making for Reiko

- Teacher directed
- Independent seatwork
- Transition group
- Peer attention
- Teacher attention

### Review Interview Data and Put Information in the Relevant Column

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### Classwide Screening using CBM and Percentage of Disruptive Behavior

Assessing student performance with peers in the classroom setting

<table>
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<th>Math</th>
<th>Writing</th>
<th>Reading</th>
<th>Behavior</th>
</tr>
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<tbody>
<tr>
<td>15/29</td>
<td>70</td>
<td>80</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>11/29</td>
<td>60</td>
<td>70</td>
<td>60</td>
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### Linking Assessment to Intervention

Data from Interview and Environmental Observation

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- Few checks from peers (well-behaved class)

If all yes

- Individual intervention
- Individual Behavior

Data from STEEP

- FA DATA
- TA Work Escape

### Reiko-2nd grader

Reward

Peers
Can you change or prevent antecedents?

Problem Behaviors:
- Talking out
- Bothering others

Desirable Behaviors: Can they do it?

Maintaining Consequences:
- Immediate Peer attention

Treatment: How will you eliminate or decrease the occurrence of consequences for inappropriate behavior?

Train or Instruct?
Add to Treatment plan: How will you apply maintaining consequences?

For behavior problem only:
(i.e., all collected data indicates student’s academic performance is not a problem)

Behavior Brief Treatment Validation test

WHAT WORKED?

Linking assessment to intervention

Data from Interview and Environmental Observation

If any no

If all yes

Individual Intervention

Data from STEEP

Scores below district/benchmarks

Train and Treatment Trial(s) with teacher in classroom

Classwide intervention

Data from STEEP

Scores above district/benchmarks

Train and Treatment Trial(s) with teacher in classroom