



Utilizing Technology in Tier 3 Data Collection

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FBA Process

- Student Identification
- Identify Action Team Members
- Record Review
- Interview
- Develop a Summary Statement
- Observations
- Action Team Meeting 2

Step 1: Core Team identifies a student who exhibits a pattern of problem behavior that impedes his/her learning, or the learning of others, which persists despite implementation of school or classroom intervention strategies. Core Team member identified as Action Team facilitator.

Step 2: Core Team identifies and notifies Action Team members.

Step 3: Core Team member reviews relevant records to obtain information about attendance, academic performance (grades, academic assessment, response to previous intervention) and social behavioral performance (office referrals, classroom minors, screening information, response to previous intervention.)

Step 4: Action Team member(s) interview individuals (teachers, staff, student, family) who have direct experience with the student.

Step 5: Action Team meets to analyze information collected from the record review and interviews to:

- a) Develop an observable & measurable description of problem behavior(s).
- b) Identify the contexts (daily routines) that are and are not associated with the problem behavior.

Is there sufficient information to identify antecedent, consequence, settings event(s) and function of the problem behavior to formulate a summary statement?

NO

YES

Schedule observations to collect more information (Go back to step 5.)

Step 6: Schedule observations to confirm the Summary Statement.

Step 7: Action Team meets to develop a behavior intervention plan based on the summary statement.



Antecedent Events

Definition

- Antecedent – An event or circumstance that happens immediately before and ***occasion*** or ***trigger*** problem behavior.

(Crone & Horner, 2003)



Antecedent Events

Common Antecedent Events

- Tasks are too difficult
- Peer or Adult attention/interaction
- Transitions from one activity to another
- Lack of access/availability of specific item or activity/task
- Lack of Peer or Adult attention/interaction

Identifying Antecedent Events

- What types of activities might be occurring within a specific context?
 - Independent seat work
 - Large group instruction
 - Small cooperative work groups
- Which peers or adults are present in this context?
- What tasks are most commonly assigned during this context?
 - Tasks that require memorization (e.g. math facts, spelling, etc.)
 - Tasks that require mastery of specific skills such as reading decoding or writing sentences

Identifying Problem Behavior, Context, Antecedent Events

- When he is in classes with a large number of students, and the teacher is speaking to the whole class, Nick shouts out questions that are not related to the topic the teacher is addressing.

Context: During _____

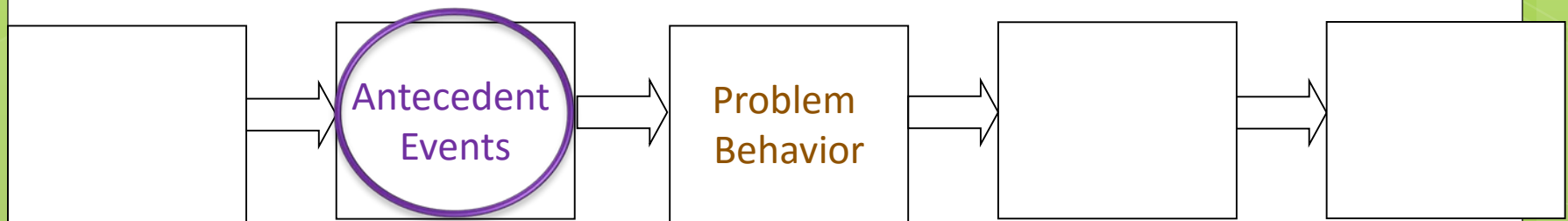
Antecedent
When:



Behavior
Student does:

Behavior Pathway Diagram

Context:



“During : Some context when some antecedent event occurs, the student is likely to engage in problem behavior because some consequence occurs; therefore, the function of the behavior is to obtain or avoid something.

This is more likely to occur when some setting event occurs.”



Identifying the Consequence

Definition of Maintaining Consequence:

- Any event that occurs immediately after a behavior and **increases** the likelihood the behavior will occur again.



Identifying the Consequence that Appears to Maintain Problem Behavior

- What consequence reliably follows the problem behavior?
 - What do peers do?
 - look, laugh, talk, walk away
 - What does the teacher do?
 - redirect, reteach behavior, provide academic assistance



Identifying the Consequence

Common Consequence Events

- Adult or Peer respond to student
- Removal of teacher or peer attention
- Increased access/availability of preferred activity/task
- Removal of preferred activity/task



Identify Consequence that Appears to *Maintain* Problem Behavior

- Often, two consequences follow the problem behavior (e.g. Teacher talks to student and student is moved to timeout.) How will we determine which consequence is actually maintaining the student's problem behavior?

Ask, "Would the problem behavior likely continue even if the consequence did not occur?"

Problem Behavior, Context, Antecedent Events, Consequence Events

Joe whistles and looks away when peers talk to him during free time activities. This results in peers walking away from him.

Context: During _____

Antecedent
When:



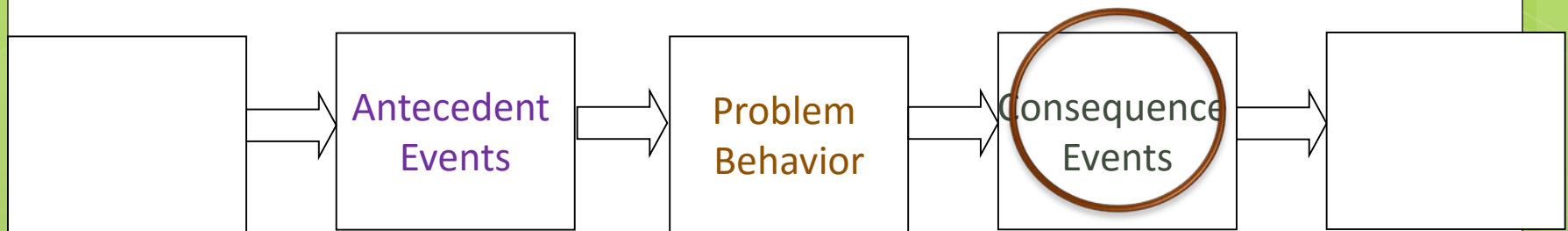
Behavior
Student does:



Consequence
Because this
happens:

Behavior Pathway Diagram

Context:



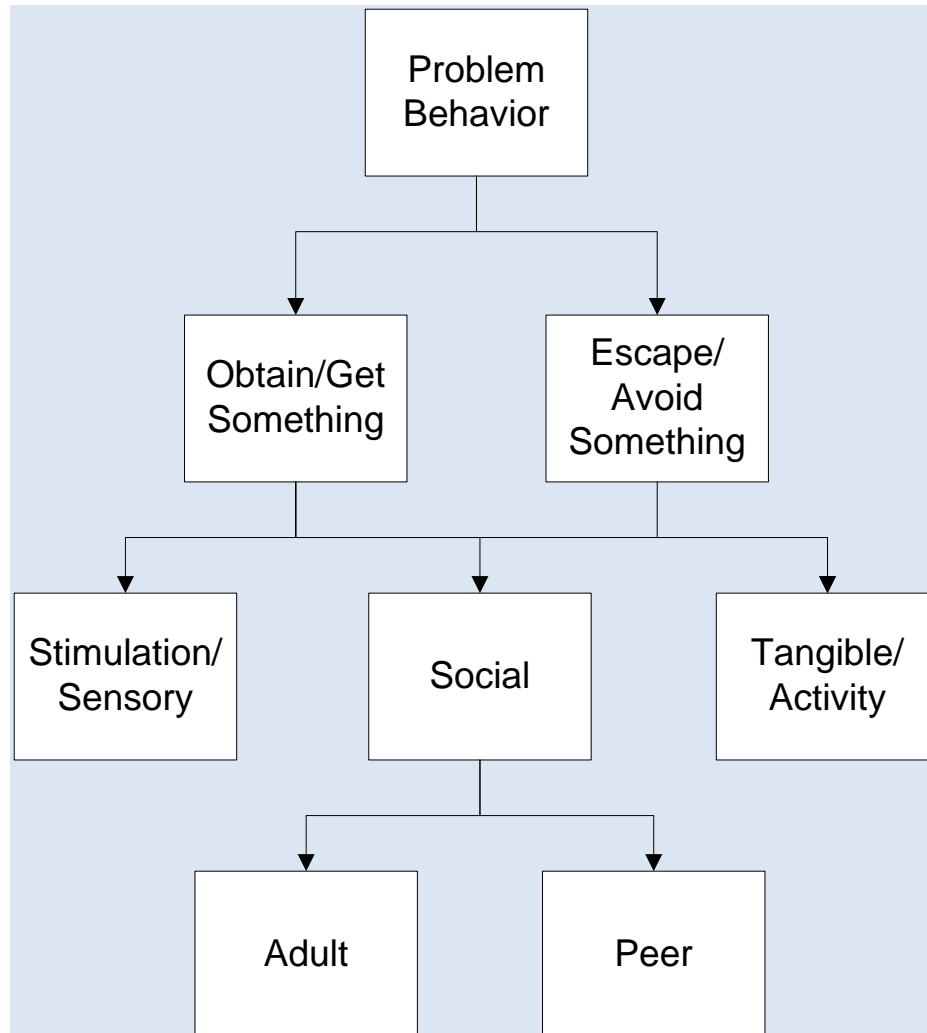
“During : Some context when some antecedent event occurs, the student is likely to engage in problem behavior because some consequence occurs; therefore, the function of the behavior is to obtain or avoid something. This is more likely to occur when some setting event occurs.”



Identify the Function of the Behavior

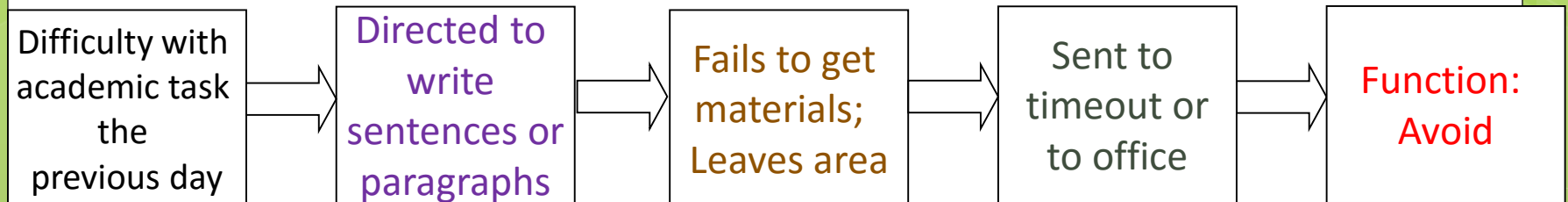
- Examine the identified antecedent and consequence events in each of the contexts you identified.
- Determine if the pattern of antecedents and consequences indicate the student is attempting to obtain something or avoid something.

Functions



Behavior Pathway Diagram

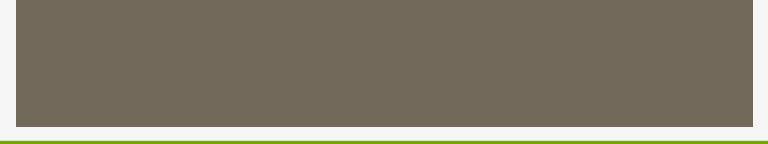
Context: During independent work time in CA, science and social studies



“During independent work time in CA, science and social studies when she is directed to write sentences or paragraphs, Pat is likely to fail to get out her materials, leave her assigned work area and walk around the room because she is sent to timeout or to the office; therefore, the function of the behavior is to avoid those tasks. This is more likely to occur when Pat has had difficulty with a similar task the previous day.”

FBA Process

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Observation

Confirming the Summary Statement

- Confidence level that the summary statement
 - If we have a confidence level of 1, 2 or 3, we will schedule an observation to *collect more information*.
 - If we have a confidence level of 4, 5 or 6, we will schedule an observation to *confirm our summary statement*.

FBA Observation: Frequently Asked Questions, p66



Guidelines for Observations

- If you have observed at least 5 instances that verify the summary statement

OR

- You obtain a 3 to 1 ratio of verifying vs non-verifying observations
- Once you are convinced that your observations represent the behavioral pattern you can summarize the data.

(Loman & Borgmeier, 2010, p. 59)



Determine simplest way to collect data

- Types of recording:
 - Event-based recording
 - Time-based recording



Event-Based Recording

- Frequency recording
 - Count occurrences of behavior in a specified time frame
 - Best for behaviors that have a definite beginning and ending of similar duration and low frequency
 - Standardize the time frame of observation for most accurate summarization



Event-Based Recording

- Duration
 - Record the length of time a behavior occurs
 - Best for behaviors occurring for more than a few seconds (e.g. temper tantrums, out of seat, off task)
 - Easiest to use a stop watch – start it when behavior begins and stop it when behavior ends



Time-Based Recording

- Requires a timer
- Provides only an approximation of behavior
- Requires less teacher time
- Can account for behavior of various lengths
- The shorter the interval of recording, the more accurate the data



Time-Based Recording

- Partial interval recording – Behavior is recorded if it occurs during any **part** of the interval.
- Whole interval recording- Behavior is recorded only if it occurs the **whole** interval.
- Momentary interval recording- Behavior is recorded if it occurs the **moment** the interval ends.



Time-Based Recording

- Partial Interval Recording
 - When to use – behaviors occur occasionally or at a low rate.
 - How to use – Behavior is recorded if it occurs during any part of the interval. Interval is adjusted based on the usual or hypothesized amount of time the behavior occurs.
 - Disadvantage - Tends to over estimate occurrences (which increases as the interval increases).

Time-Based Recording

- Whole Interval Recording
 - When to use - Best for behaviors of long duration (interval should be set at the shortest observed occurrence of the behavior).
 - How to use - The behavior is recorded only when it has occurred the entire interval.
 - Disadvantage - Tends to underestimate the behavior.

Time-Based Recording

- Momentary Interval Recording
 - When to use - Best with behaviors that are sporadic but at high rates.
 - How to use - Observer looks at student at the end of each interval to record if behavior is occurring at that moment.
 - Disadvantage - Tends to underestimate behavior (the smaller the interval the more accurate).

Behavior Defined



Yes

Are you able to monitor continuously?

No

Choose one

Choose one

Interest in frequency or rate

Interest in length of time a behavior occurs

Results in permanent product

High frequency behavior

Permanent product

Whole interval

Event Recording (tally)

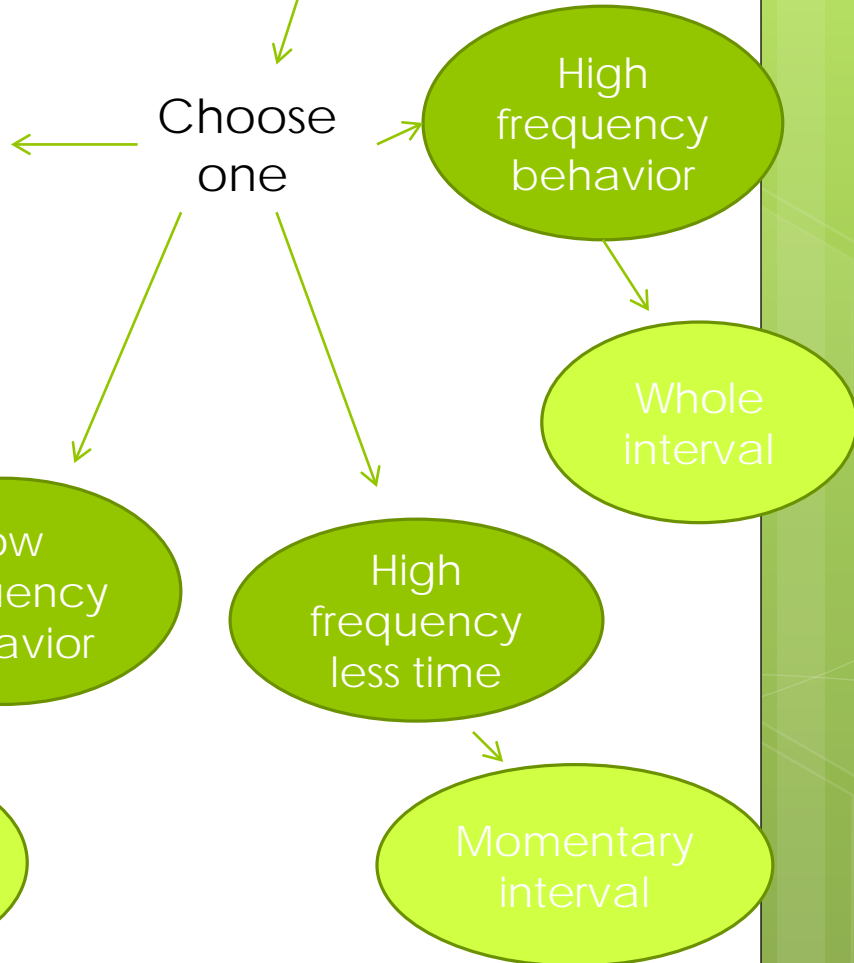
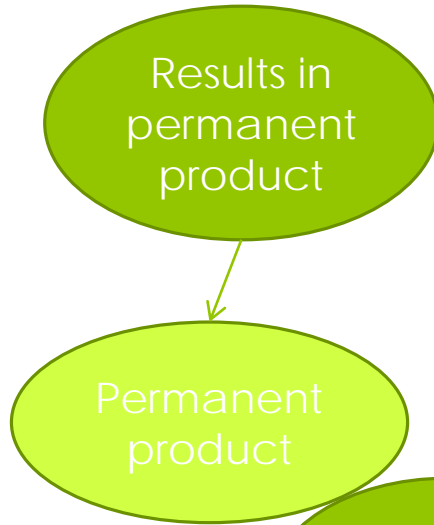
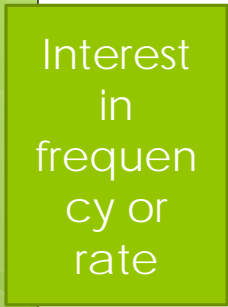
Duration recording

Low frequency behavior

High frequency less time

Partial interval

Momentary interval



<i>Type</i>	<i>Name</i>	<i>Behavior</i>	<i>Metric</i>
Event Based	Event recording	Use when frequency or rate of a behavior are of a concern - behaviors must be of equal duration and occur at medium to low rates - count both problem and replacement to get "percent"	<ul style="list-style-type: none"> • Rate of behavior per minute • Frequency (use only when obs. period is standard) • Percent of Opportunities (appropriates divided by appropriates + inappropriate x 100)
	Duration	Use when amount of time a student engages in the behavior important	Percent of time
	Controlled Presentation	Use when teacher can control the number of opportunities to display a behavior	Percent of opportunities
Interval Based	Partial / Whole / Momentary	Use when an equivalent to the amount of time a student engages in a behavior is needed	Percent of Intervals



Collect Observational Data

- Collect during a context where the behavior is likely to occur
- Collect for a standard amount of time
- Collect 3 to 5 times or data points for baseline
- Collect after intervention has been implemented during the same context on a regular schedule

Behavior Snap

- A multimodal behavior observation tool created by school psychologists to identify the frequency, duration, and function of behaviors of interest for use on the iPad.

Time Saving Advantages

- Provide clear behavioral information for data-driven decision making
- Compile data into meaningful and easy to read graphs with the touch of a button
- Produce graphs in PDF format to share by email with parents, teachers, and administrators
- Copy and paste graphs into BIPs or reports with ease
- Utilize four different behavior observation tools in one app: Interval, ABC, Frequency, and Duration Observations

www.behaviorsnap.com

Uses of Behavior Snap

- Identify and target specific behaviors of concern
- Determine antecedents and maintaining consequences of problem behaviors
- Gather behavioral data for FBA
- Develop behavior intervention plans
- Write and track BIP goals and objectives
- Monitor the efficacy of BIP
- Track behavior across environments

Features of Behavior Snap

- Allows for multiple behaviors to be counted simultaneously within one direct observation
- Customizable for individual students (saves write-in values by student)
- Quick start function that allows the user to begin an observation immediately, entering pertinent student identification information at a later time
- Sophisticated design and meaningful graphs
- Confidentiality measures that adhere to professional ethical standards

www.behaviorsnap.com



See Behavior Snap in Action!

www.behaviorsnap.com

Interval Recording

Frequency Recording

www.behaviorsnap.com

Duration Recording

www.behaviorsnap.com

ABC Recording

Behavior Tracker Pro

- iPhone/Ipod Touch application that allows Tier 3 team members, aides, teachers or parents to track behaviors and graph them.
- The application was specifically designed to support the behavioral treatment plans

Types of Data Collected

- ABC Data
- Frequency Data
- Duration Data

Time Saving Advantages

- Start and stop a timer with easy to use “double taps” on the iPhone or iPod touch.
- Send graphs from the iPhone as a picture to parents, teachers or other team members.

Uses of Behavior Tracker Pro

- Take ABC data or only frequency and duration data
- Graph data to assess the efficacy of the treatment plan.
- Graph by ABC: Choose Antecedent, Behavior or Consequence as your graphing focus.
- Insert phase change lines, allowing you to document changes in the treatment plan or environment illustrating before and after results.
- Send graphs from the iphone as a picture to parents, teachers or other team members.

www.behaviortrackerpro.com

Features of Behavior Tracker Pro

- Video Capture - record a behavior or even a procedure/intervention that can then be shared with the rest of the team
- Analyze and graph data by student.
- Support multiple observers and multiple clients. Add observers, students and ABC's:
- Fully customizable so that you can take and graph data for your team.

www.behaviortrackerpro.com



See Behavior Tracker Pro in Action!

www.behaviortrackerpro.com

Behavior Assessment Pro

- Designed for Function Behavior Analysis
- To be used by school intervention team

Time Saving Advantage

- Questions are scripted which allows for consistent analysis
- Could be a disadvantage since teams are unable to customize any of the questions

Uses of Behavior Assessment Pro

- Designed for use by Tier 3 intervention team
- User answers series of questions surrounding a particular behavior
- Questions are programmed for antecedents, consequences, etc
- Allows for a more intensive analysis of behavior

See BAP in Action!



See BAP in Action!

AT&T 12:12 PM

Informant

Section 1

Q: How **severe** is the screaming?

A: Mild: The behavior is disruptive but there is little risk to property or health

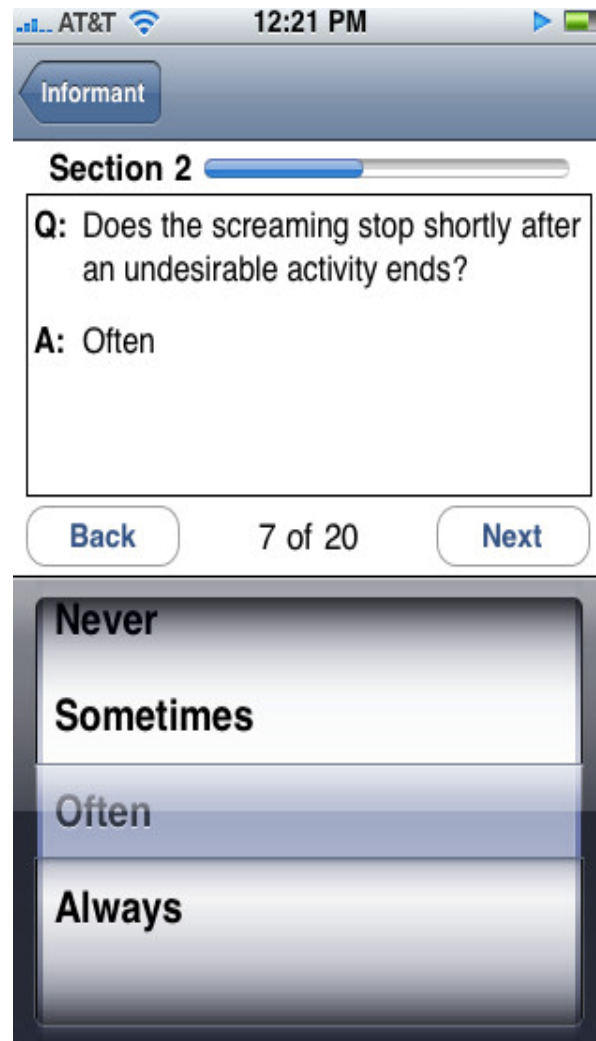
Back 2 of 5 Next

Mild

Moderate

Severe

See BAP in Action!



See BAP in Action!

AT&T 12:34 PM

Informant

Section 3

Q: Does Joey lack the skills and/or motivation to be successful?

A: Yes, Motivation

Back 3 of 4 Next

Yes, Skills

Yes, Motivation

Yes, Both

No

See BAP in Action!



BAP Behavior Assessment Pro
Behavior Assessment for Joseph Shmo

18) Does the screaming stop if Joey is given access to the item or activity he wanted?
Never

19) Does Joey engage in the screaming when he must end a desirable activity? (I.e., stop playing, give up a toy or food)
Always

20) Does the screaming occur when Joey sees someone else with a desirable item/activity?
Sometimes

Section 2 Calculated Scores

Category	Score
Attention	1
Escape	3.5
Sensory Stimulation	1
Pain Attenuation	2.2
Tangible	2

Section 3

1) Does Joey resist the length of the activity?
No

Behavior: "screaming"

Informant: Sally Smith

Apps in Presentation

- Behavior Snap \$29.99
- Behavior Tracker Pro \$29.99
- Behavior Assessment Pro \$4.99

For more assistance contact:

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