

Function Based Intervention: Case Study of an Adolescent

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FBA Process

- Interview
- Observations
- Determine function
- Choose Replacement
- Select Intervention
- Develop and Monitor
- Follow-up

Figure 9.1. *Example of Frequency Recording*

Student: Jimmy Observer: Mrs. Robbins
Setting: Math Class Date: 2-1-06
Behavior: Profanity
Start: 10:05 Stop: 10:25

//

Total = 12

Student: Jimmy Observer: Mrs. Robbins
Setting: Math Class Date: 2-2-06
Behavior: Profanity
Start: 10:05 Stop: 10:25

////

Total = 14

Systematic Process

- Umbreit, Ferro, Liaupsin, & Lane (2007)
 - FBAs
 - Intervention Design
 - Some research support
 - ❖ Lane et al., 2006
 - ❖ Liaupsin et al., 2006
 - ❖ Umbreit, Lane, & Dejud, 2004

Fiona

- 14 years old
- Repeating 7th grade
- Frequent absences
- Multiple behavioral and discipline referrals
- Documented written language, reading, and math problems

Interviews

- Free form
- Structured
- Semi-structured
- Define the problem!

- Preliminary Functional Assessment Survey
- Student Assisted Survey

PRELIMINARY FUNCTIONAL ASSESSMENT SURVEY

Instructions to PBS Staff: The following interview should be conducted with the student's teacher. Prior to the interview, ask the teacher whether or not the Classroom Aide should participate. If yes, indicate both respondents' names. In addition, in instances where divergent information is provided, note the sources attributed to specific information.

Student _____

Subject #:

Age: _____ Sex: M _____ F _____

Interviewer: _____

Date:

Respondent(s): _____

1. List and describe behavior(s) of concern.

a.

b.

c.

d.

e.

2. Prioritize these behaviors (which is the most important?)

a.

b.

STUDENT ASSESSMENT

Student:

Date

Administration Time: _____

Target Behavior:

1. When do you think you have the fewest problems with _____ (target behavior) in school?

Why do you not have problems during this/these time(s)?

2. When do you think you have the most problems with _____ (target behavior) in school?

Why do you have problems during this/these time(s)?

3. What causes you to have problems with _____ (target behavior)?

4. What changes could be made so you would have fewer problems with _____ (target behavior)?

5. What kinds of rewards would you like to earn for good behavior or good school work?

Rate how much you like the following subjects:

Figure 3.2. (continued)

	Don't like at all		Fair		Like very much
Reading	1	2	3	4	5
Math	1	2	3	4	5
Spelling	1	2	3	4	5
Handwriting	1	2	3	4	5
Science	1	2	3	4	5
Social Studies	1	2	3	4	5
English	1	2	3	4	5
Music	1	2	3	4	5
P.E.	1	2	3	4	5
Art	1	2	3	4	5

Observations

- In the natural environment
- After interviews
- Post-hoc is possible
- Practice
- Two ways to do ABC data collection

Observations: ABC Format

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A-B-C Observation Form

Student: _____

Target Behavior: _____

Date: _____ Time: _____

Location: _____

Observer: _____

Antecedent	Behavior	Consequence

or

Function Matrix

	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangibles / Activities		
Sensory		

Ask Questions Using Function Matrix

- Does the interview and observational data suggest that the behavior is maintained by:
 1. Access to attention?
 2. Escape from attention?
 3. Access to tangibles or activities?
 4. Escape from tangibles or activities?
 5. Access to sensory stimulation?
 6. Escape from sensory stimulation?

STUDENT ASSESSMENT

Student: _____

Date _____

Administration Time: _____

Target Behavior: _____

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A-B-C Observation Form

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Target Behavior: _____

Date: _____ Time: _____
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Antecedent	Behavior	Consequence

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	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
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STUDENT ASSESSMENT

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Date _____

Administration Time: _____

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A-B-C Observation Form

Student: _____
Target Behavior: _____

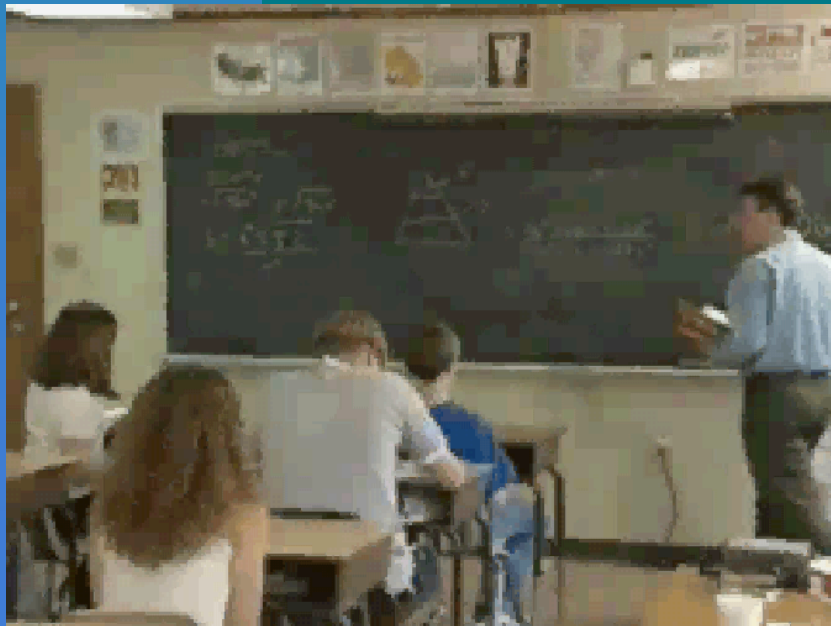
Date: _____ Time: _____

Location: _____

Observer: _____

Antecedent	Behavior	Consequence

or



	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangibles / Activities		
Sensory		

Fiona

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Fiona: Behavioral Definitions

- Target Behavior
 - Off-task (work refusal, incomplete work, yelling, cursing)
- Replacement behavior
 - On-task (sitting quietly, completing work, referring to staff and peers appropriately)

Fiona: Interviews

■ Staff Interviews

- No problems in science; accommodations provided
- Social studies lectures okay, but frustrated with reading and group assignments
- Same for math
- No accommodations in math or social studies

■ Student Interviews

- Felt stupid
- Didn't know how to do the work in math
- Couldn't read the social studies material

Fiona: Observations

- Eight observations
 - 15 minutes
 - Science, math, and social studies
 - Few instances in science, many in math and social studies
- Antecedents of off-task
 - When asked to participate in math
 - When asked to read or write in social studies
- Consequences of profanity
 - Assistance or redirection
 - Ignored in math; seatwork detention assigned; behavior escalated

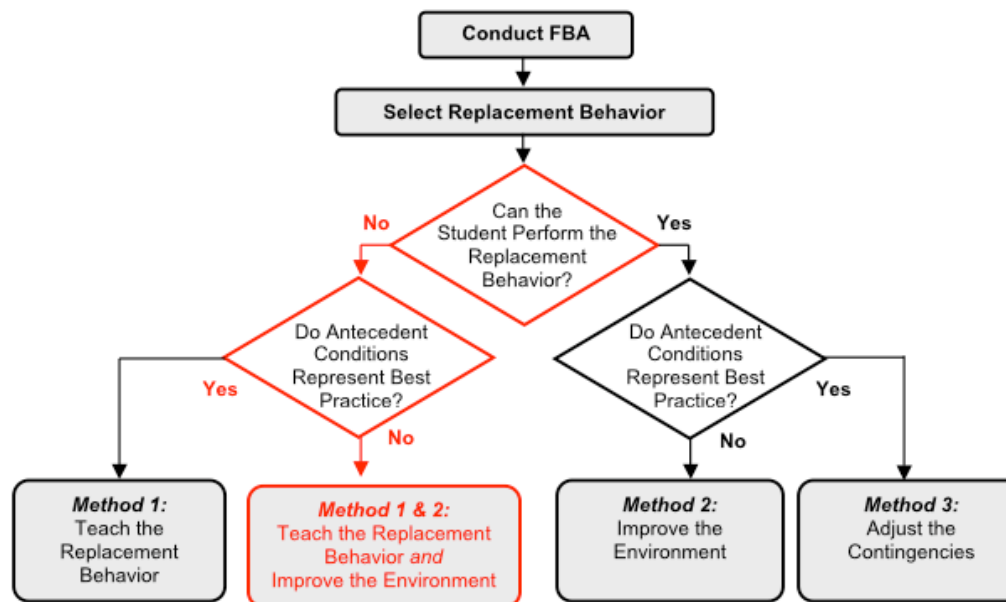
Function Matrix: Fiona

	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangibles / Activities		X
Sensory		

Select the Intervention

- Function-based Intervention Decision Model (Umbreit et al., 2007)
 - Systematic process
 - Links intervention components to FBA data
 - 3 Intervention Methods
 - All 3 Methods
 - ❖ Adjust antecedent conditions
 - ❖ Reinforce replacement behavior
 - ❖ Withhold reinforcement for target behavior

Fiona: Select the Intervention



Fiona: Select the Intervention

- Science
 - No problems; no intervention necessary
- Social studies
 - Cannot perform the behavior
 - Environment is functional
 - Method 1
- Math
 - Cannot perform the behavior
 - Environment is not functional
 - Methods 1 and 2

Developing the Intervention

- Adjust Antecedent
- Reinforce Replacement Behavior
- Extinguish Target Behavior

Fiona: Social Studies Intervention

Table 2

Function-based intervention for social studies for Fiona

Required Components	Resulting Intervention Elements
Adjust antecedent conditions so new behaviors are learned and aversive conditions avoided.	All texts, worksheets, and handouts adjusted to reflect student's instructional reading level. Student assigned a peer buddy for reading support.
Provide appropriate reinforcement for replacement behavior.	Token reinforcement for on-task behavior and work completion.
Withhold the consequence that previously reinforced the target behavior.	Redirection; no removal of task-demand.

Fiona: Math Intervention

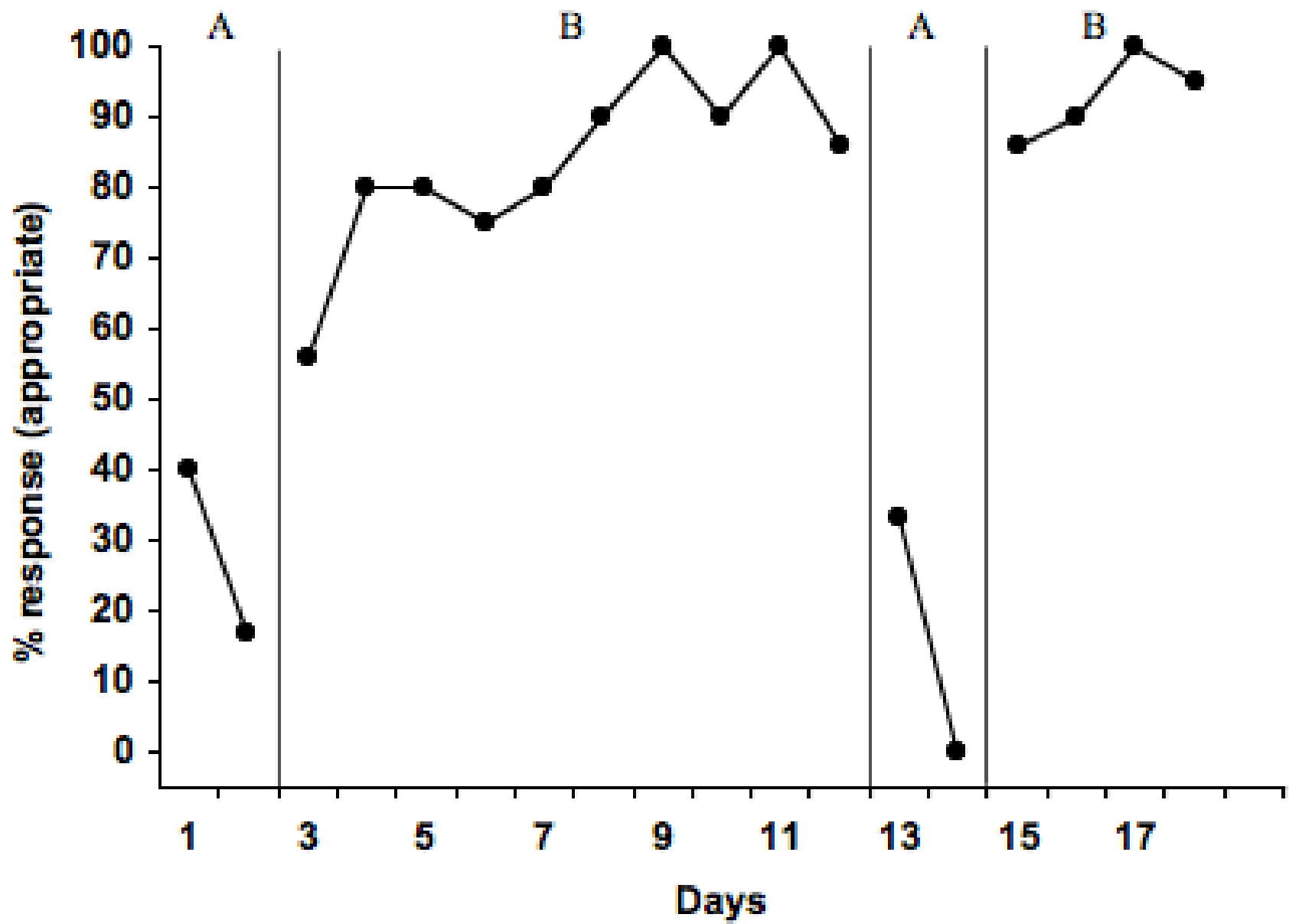
Table 3

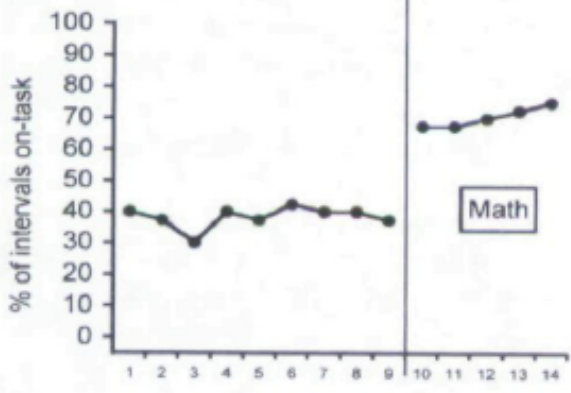
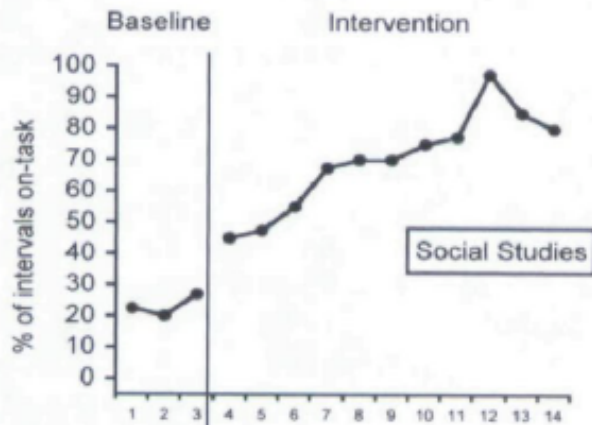
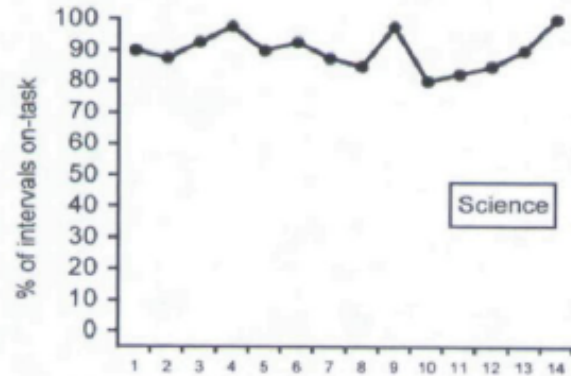
Function-based intervention for math for Fiona.

Required Components	Resulting Intervention Elements
Adjust antecedent conditions so new behaviors are learned and aversive conditions avoided (Method 1).	Adjust instructional level using CBM and unit pre-tests.
Eliminate antecedent variables that occasion the target behavior; Establish antecedent conditions in which the replacement behavior is more likely to occur (Method 2).	Use text with ability-level scope and sequence. Pre-teach content using concrete models and guided practice . Review and Reteach when errors made. Maintain proximity to answer questions.
Provide appropriate reinforcement for replacement behavior.	Use school's token reinforcement system for on-task behavior.
Withhold the consequence that previously reinforced the target behavior.	Redirect; maintain task demand.

Measurement

- Daily 20 minute observations
- Inter-observer agreement
- Treatment Integrity





Sessions

Conclusions

- Fiona's behavior improved dramatically
- Assessment/intervention process effective & socially valid
- More research needed
 - Students with EBD
 - Students of different ages, abilities, cultural backgrounds, and nationalities

Write Behavior Intervention Plan

1. Behavioral Definitions

2. Rationale

3. Baseline Data

4. Function of the Behavior

5. Behavioral Objective

6. Intervention Procedure

7. Fading and Generalization

8. Data to be Collected

9. Program Review Date

10. Personnel and Roles

11. Emergency Procedures

Review

- Interview
- Observations
- Determine function
- Choose Replacement
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Resources

Contact:

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Book:

Functional Behavioral Assessment and Function-Based Intervention : An Effective, Practical Approach (Paperback) by [John Umbreit](#), [Jolene Ferro](#), [Carl J. Liaupsin](#), [Kathleen Lynne Lane](#)

Web Info and Courses:

<http://www.pbisaz.html>

<http://www.ed.arizona.edu/bss/>

